

Living conditions and quality of life

Access to essential services for people on low incomes: Energy, public transport and digital communications



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Access to essential services for people on low incomes: Energy, public transport and digital communications



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Authors: Hans Dubois, Klára Fóti and Tadas Leončikas

Research managers: Tadas Leončikas

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European Foundation for the Improvement of Living and Working Conditions

Telephone: (+353 1) 204 31 00

Email: information@eurofound.europa.eu

Web: www.eurofound.europa.eu

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Executive summary

This paper focuses on specific national measures aimed at improving access for people on low incomes to energy services, public transport, and digital communications over the period from 2020 to early 2022. The right to access the services mentioned is referenced in the Principle 20 of the European Pillar of Social Rights, and is also relevant in context of advancing digital transformation, green transition, and the objectives of social Europe. The paper overviews the measures across the EU Member States to make the essential services accessible by clustering the major types or targets of the measures, and by succinctly listing main country-level examples.

The considerable rise in energy prices over 2021 and 2022 posed a specific challenge for access and affordability of energy and transport services – in Europe and globally. The most dynamic area in terms of a large range of measures being developed in the period covered was the measures to address the costs of energy services. Most Member States apply reduced tariffs and/or cash benefits to assist groups in need of support in paying for energy services, however, the bulk of the recent decisions adopted across the countries to reduce the cost for the end users focus on universal measures (non-targeted to people on low incomes only). In some instances, social tariffs (i.e., reduced tariffs for certain supported groups) have been adjusted. However, the extent of the relief provided by these measures to people on low incomes or groups in vulnerable situations is yet difficult to identify. The public access to evidence used for modelling impact of energy costs as well as of the newly adopted measures is limited so far: the evidence base for on-going policy adjustments will need to catch up.

Support for access to public transport is characterised by a wide array of measures – many Member States are supporting certain target groups with reduced tariffs. As has been the case previously, rarely the income criterion for eligibility of such support is directly used, but calculations for the minimum income sometimes include budget for public transport. Some more instances of extending affordable access to more people appeared across the EU recently, even if only with a limited number of incremental examples. The scope of the entitlements for public transport also differs a lot: outstanding examples include public transport free for everyone in Luxembourg and cross-country travel being free for older people in Ireland and Hungary.

A vast majority of EU population across many countries are regularly using the digital communications, and most countries have ambitious targets to further improve the technical infrastructure for better connectivity. However, these measures are not targeting the specific individual user (or the remaining non-user) groups, especially not in relation to their income levels. A few more instances of social tariffs for installing access to internet and paying for connection/data services appeared in comparison to the past, but there are Member States where affordability barrier for using internet was reported in the past and there are still no measures dedicated to people on low incomes. Provisions for basic/uninterrupted supply of digital communications exist only in a small number of countries and this suggests that the progress towards ensuring of access to internet as an essential service has been limited.

The extraordinary rise in costs of energy explain the need to focus on affordability, first of all of energy services and public transport. Improving digital skills and ensuring access to the digital communications could come in support of using smart metering – to help awareness of costs and potential savings in using energy services. Moreover, for all three service areas considered, importance of non-financial dimensions for improving access to them came up – both generally and for people on low incomes due to potential vulnerability of the latter. In case of energy services, more

could be done to protect against the disconnection from services for people in vulnerable situations; prevention of situations (such as arrears or indebtedness) leading to a risk of disconnection could also be improved via timely and adequate advisory and support services.

In the area of public transport, the availability of transport networks to meet the existing needs remains an important dimension beyond affordability. In a broad social and policy context, certain needs could gain more recognition at present such as accessibility of digital ticketing and information services to people with disabilities; making sure that transport services take into account the needs of carers for persons with care needs; and in regard to increasing a range of options for active mobility. For the green transition to be scaled up, the solutions to greening the mobility need to consider access to good quality housing near where work and services are located.

Regarding access to digital communications, there seems to be a trend in the making – the measures emerge that aim to ensure the population have skills to not only access, but also to make best use of what the digital technologies and information can offer. However, measuring the impact of upskilling programmes seems yet to be developed, in order policy making could be guided by evidence.

While the report focused rather specifically on identifying particular measures in a current period, it is suggested that access to energy, public transport, digital communications or other essential services can also be seen as a part of social citizenship and be promoted via general measures to improve living standards; this could also help building societal resilience long-term. Reducing costs of services such as energy, public transport and digital communications can benefit people on low incomes or in vulnerable situations by helping them to save a larger proportion of their income than is the case for the more affluent groups. Such cost reductions can also help extending a user base of, for example, energy sources or modes of transport that are preferable for improving environmental sustainability. The potential of digital communications in reducing dependence on transport (via remote work and study), in helping to reduce costs for energy by using smart metering, in accessing public services and information could also be given more attention in improving resilience of the population. However, the monitoring of the take-up and use of the support for accessing essential services could be improved for the sake of further adapting the measures to people's needs.

Introduction

‘Everyone has the right to access essential services of good quality, including water, sanitation, energy, transport, financial services and digital communications. Support for access to such services shall be available for those in need.’

Principle 20, European Pillar of Social Rights

In collecting the information on essential services, the European Commission requested Eurofound to provide input on certain aspects of existing and planned measures in the Member States to improve access to essential services. For this exercise, the focus was set on *energy services, public transport¹, and digital communications*.

This paper is comprised of three chapters focusing on the aforementioned types of essential services (energy, public transport, and digital communications). These service areas are specific in terms of their regulatory frameworks, providers, supplies or other features and are rather independent from each other, therefore they are covered separately with own set of key findings and policy pointers. Although the overview focuses on national measures, each chapter has a brief section on EU policy context to help situate the developments in a broad European background. The general conceptual points regarding assessing access to services and types of supporting measures are briefly highlighted below in the Introduction, and some overarching considerations are suggested in a conclusive section at the end of the paper.

The paper covers a period of 2020-early 2022. During this time, there was an exceptionally large number of measures adopted by the Member States in the area of energy services (and policies continued to be dynamically updated at a time of completing this paper around mid-2022), which is understandable in a context of the continued volatility of energy prices and the challenges in securing energy supplies in Europe. Due to this background, the chapter on energy services is largest in this overview. The coverage of transport services in a dedicated chapter focuses on public transport – due to its relative importance for people on lower income and to vulnerable groups that have limitations in accessing or using private transport. The chapter on digital communications reviews the national agendas on improving connectivity and how the low-income people feature in the policy plans, depicts specific initiatives to support access to the digital tools during the COVID-19 pandemic, and highlights the emerging new focus that goes beyond access to devices only and concerns digital skills.

For sourcing information, Eurofound created a questionnaire for its Network of Eurofound Correspondents (NEC), which collected information in each Member State during February-March 2022, with the reporting period of 2020-2021/early 2022. This was complemented by March-June updates from the NEC to *EU PolicyWatch* (Eurofound’s online data base of national level policy measures), and the desk research.

Previously, an overview of the national measures was produced by the European Social Policy Network in a 2020 report ‘Access to essential services for people on low incomes in Europe’ (ESPN 2020). That report was produced prior to the extraordinary challenges of the pandemic as well as large rise in energy prices over 2021-2022, and therefore the relevance of re-assessing the situation has increased.

¹ ‘Public’ refers to transport being accessible for everybody; its services may be delivered by public or private providers.

The increasing significance of developing the essential services such as energy services, public transport as well as digital communications is underscored by the goals of green transition and digital transformation in the EU.

Assessing access to services: dimensions

The monitoring of access to services of general interest for the EU policy development purposes tends to centre around availability, accessibility, and affordability. An important milestone in identifying the dimensions of service quality, including access, has been a 2010 voluntary European Quality Framework for social services, which drew attention to input, output as well as process-related dimensions, and highlighted both the person-centredness and aspects of partnership and good governance in service provision. Eurofound (2020) report on care services, in relation to the framework above, has highlighted the following dimensions that can shape all stages of the access continuum, all the way from recognising care needs to meeting these needs: informed access (information and awareness); availability; accessibility (reachability); affordability; timeliness (waiting lists; relevance, punctuality/reliability (transport)); trust (perception of service quality; preferences for specific providers, safety); stigma (acceptability, especially in relation to taking up certain support measures). While the current paper focuses on existing measures, the readers are invited to take a broad understanding of access when drawing their own conclusions about adequacy and relevance of the reported measures.

As mentioned, the services in focus of this paper – energy, public transport, and digital communications – are by and large specific in terms of providers and regulatory frameworks. Specific services may have their own peculiarities in terms of access barriers.

‘People in need’: target groups of the policy measures

Regarding the population in need of securing the access to the essential services, this exercise aimed to focus on those at risk of poverty or social exclusion (AROPE²). However, it is acknowledged that the target groups of relevant policies differ between the Member States. As it will be seen in country examples, many national measures target the groups either on the basis of certain income or expenditure levels or in relation to certain categories of social benefits (and do not use a single income threshold or a more complex definition of social exclusion). Given that income criterion is used relatively widely, this paper routinely refers to ‘people on low incomes’, however, other groups relevant in specific national contexts are also considered.

Types of policy measures to support access to essential services

Ensuring access to essential services may involve (though not be limited to) a range of social policy measures and is part of what strengthens the EU’s social dimension. Improving access to services is also expected to respect general principles of equality and fairness: preventing discrimination in using services is among the measures to secure access (According to article 36 of the Charter of Fundamental Rights, ‘The Union recognises and respects access to services of general economic interest as provided for in national laws and practices, in accordance with the Treaties, in order to promote the social and territorial cohesion of the Union’.)

With regard to main types of measures applied to assist people on low incomes, this paper covers reduced tariffs, cash benefits, in-kind benefits, and measures to ensure basic or uninterrupted supply (the key types used in a preceding exercise by the ESPN (2020)). However, it is important to

² AROPE – At risk of poverty or social exclusion, see Eurostat [glossary](#).

acknowledge that some particular measures may need more context for assessing them. For example, in the background of energy cost crisis, several countries reduced VAT for energy – while it may lead towards lower prices for end-users, it is not per-se a targeted reduction of tariff for a specific group (unless specified). There is also a challenge to consistently distinguish cash benefits from in-kind benefits: for the purposes of this paper, a direct financial support whereby the beneficiaries received income support was reported as ‘cash benefits’. This applies, for example, to the case of the minimum income support: even though the methodology behind it may have specified amounts for the purposes of transport services or for covering of the digital communications’ costs, the money received by the beneficiaries presumably can be spent on their own priorities. The voucher-type support (with or without actual use of vouchers) whereby the beneficiaries could claim reimbursement or get costs covered for strictly defined goods (such as devices for using digital communications) was considered as ‘in-kind benefits’.

Furthermore, it has not always been feasible within this project to make a fully comprehensive mapping of measures, especially where regional and local measures vary. In such cases, key examples are presented rather than comprehensive tables by Member State.

Service providers

The Principle 20 of the EPSR does not specify the arrangements behind provision of essential services. For the purposes of this exercise, essential services are understood as services for the public regardless of whether they are provided by the government (public sector) directly, private initiative or a mixed partnership (with or without some public funding involvement).

Table 0. The main guidelines defining the scope for reporting to the Network of Eurofound Correspondents:

<i>Time frame</i>	01/01/2020-present, focusing on new/changed measures since the ESPN (2020)
<i>Status of the service providers</i>	services for the public regardless of the provider type (not limited to government services only)
<i>‘People in need’ - target groups of the policy measures</i>	AROE population or people on low incomes (as in ESPN 2020); other groups relevant in national contexts
<i>Types of the policy measures to support access to essential services – in place or in planning</i>	In order of priority: social policy measures (income-related), consumer protection (such as against disconnection), other
<i>Assessing access to services - a continuum between having a need and meeting a need</i>	focus on affordability, accessibility, availability

Energy services

The main aim of this chapter is to map national measures introduced for securing access to energy services to people on low incomes amidst rising energy prices. The focus is on energy services for households, so the consumption of energy which is needed for accommodation is considered, such as for example heating oil, gas, and electricity. In addition, when relevant, transport energy, such as fuel for cars (diesel, petrol or liquified gas) is also noted.

Concerns about energy poverty and its causes (such as low income and heavy dependence on high cost, inefficient energy consumption) have been part of European and national policy discourse well before the current reporting period (2020-2022). Member States have had various (direct or indirect) measures to improve access to energy services for low-income groups as well as broader strata of society.

In practice, a vast array of measures was adopted across the Member States in the recent period, especially in 2021 and 2022. They came in response to a trend of rising energy prices. Regarding the context of this trend, Russia's invasion of Ukraine since February 2022 is often seen as a major factor affecting the supply and the market costs of fossil fuels. However, the trend took off well before it and the prices rose enormously throughout 2021³. It should also be added that the rise in private expenditure for energy began prior to that – still during the COVID-19 pandemic. The pandemic situation led to loss of income for some people (restrictions to working) as well as to the increased consumption of energy due to spending more time at home (leading to higher bills).

EU policy context in brief

In line with its commitment to guarantee access to essential services, including energy, the EU has played a major role and extended its engagement over time. The European Commission (EC) guided the efforts by the Member States, especially within the context of the European Green Deal (EGD). It also provided coordination in response to rising energy prices, and also to the war in Ukraine. The active role of the EU is manifested, among others, in legislation (e.g., Electricity Directive (EU) 2019/944, Gas Directive 2009/73/EC – currently under revision, EU Energy Efficiency Directive - EED (EU 2018/2002), Energy Performance of Buildings Directive (2018/844/EU)). One of the main objectives of the recent legislative package *Fit for 55* is to help Member States alleviate energy poverty and to empower and protect vulnerable customers. Especially within the context of Just Transition, Regulation (EU) 2018/1999 on the Governance of the Energy Union and Climate Action (Article 3 (d)) requests Member States to assess the number of households in energy poverty and, if significant, elaborate a plan to reduce it. In terms of funding, not only are the Recovery and Resilience Facility and Just Transition Fund of great importance, but also the proposal for a Social Climate Fund. Initiatives for sharing good practices also are part of the active role of the EU in this area (e.g., *POVERTY-Renewable energy for vulnerable groups*” (2019-2023), financed by INTERREG EUROPE; [Energy Poverty Advisory Hub \(EPAH\) Atlas](#)), also, facilitation of the exchanges between Member States by the European Commission within the Energy Poverty and Vulnerable Consumers Coordination Group.

The considerable energy price rise posed a specific challenge for access and affordability of energy services throughout 2021 and 2022 – in Europe and globally. In autumn 2021, the European

³ International Energy Agency (2022), 'Evolution of energy prices, Oct 2020-Jan 2022', at: <https://www.iea.org/data-and-statistics/charts/evolution-of-energy-prices-oct-2020-jan-2022> (accessed 20/07/2022)

Commission highlighted potential measures that the Member States could employ to support their vulnerable populations during the challenging period (Commission Communication 2021/660 of 13 October 2021 on *Tackling rising energy prices: a toolbox for action and support*; also see Commission Recommendation (EU) 2020/1563 of 14 October 2020 on *energy poverty*). This policy area continues to be actively developed throughout 2022 (in time of writing), as seen for example, in the REPowerEU plan (European Commission, 2022b), the aim of which is to rapidly reduce dependence on Russian fossil fuels and ‘fast forward the green transition’. The focus of this chapter, however, is on the Member States.

The measures presented in the chapter are categorised by their main types. The chapter focuses on the initiatives/policies, which were introduced since the beginning of 2020 (and sometimes part of a longer-term, multiannual programme) with an aim of easing access to energy services, tackling energy poverty and facilitating green transition. The chapter also outlines the issue of take-up by summarising the information gathered from the national correspondents.

Risk of increase in energy poverty? The challenge of diverse definitions

The focus of this chapter is on the challenges that primarily low-income individuals and households must face when accessing energy services amidst rising energy prices. For people in disadvantaged situations, the threat of energy poverty has become acute, and this issue should be tackled immediately. Moreover, the middle-income groups could be affected, too.

As the review of the national measures reveals, the target groups are different across the Member States and the definition of energy poverty is also diverse in the EU. The definition could be crucial due to its link to data collection; hence, it could be decisive to national policy measures. For example, in **France**, the 2010 law (Art. 11, law n° 2010-788 of 12 July 2010) defines the people affected by energy poverty as follows: ‘... a person who experiences in his dwelling particular difficulties in obtaining the energy supply necessary to satisfy his basic needs due to the unsuitability of his resources or his housing conditions.’ In addition, the National Energy Poverty Observatory, in its assessments of the phenomenon, relies on 3 indicators⁴, on the basis of which it is estimated that the phenomenon affects 12 million people, and 4 million people are unhoused or poorly housed (Fondation Abbé Pierre, 2022). When defining energy poverty in **Ireland**, a variety of different metrics have been used, measuring fuel expenditure against wider income. The 2011 Warmer Homes strategy put forward a ‘preliminary’ official definition based on reported expenditure (Department of Communications, Energy and Natural Resources, n.d.). It proposed a ‘core indicator’ of energy poverty defined as a household spending more than 10% of its income after housing cost on energy services, and supplementary indicators of ‘severe’ and ‘extreme’ energy poverty defined as spending more than 15% and 20% respectively. This metric appears to be generally followed by the state for the definition.

⁴ These are: (i) the energy effort rate (TEE): any household spending more than 10% of its income on energy, and belonging to the poorest 30% of the population in France; (ii) The low income, high expenditure indicator (BRDE): households are considered to be in energy poverty on two conditions: their income is low (below the poverty line) and their energy expenditure, in relation to the size of the dwelling (m²) or the family composition (UC), is high (above the national median); (iii) the feeling of discomfort (cold) – a subjective indicator of cold.

A statistical report, released by the Central Statistics Office of Ireland (CSO), and based on the 2016 census data, identified those groups, which are specifically vulnerable (Central Statistics Office, 2021)⁵.

In **Romania**, the National Strategy of 27 November 2020 on long-term renovation of residential and non-residential building stock (both public and private) defined energy poverty as the result of a mix of different factors: low income, high-energy costs, limited access to services, etc. In addition, the law on social protection measures for vulnerable energy consumers (adopted on 16/09/2021) defines the vulnerable energy consumer as a single person / family who, due to health, age, insufficient income or lack of access to energy sources are unable to cover their energy needs, so they require social protection measures and additional services to ensure meeting at least their minimum energy needs (Art. 3). In practical terms, however, the concrete support measures are still the allowances for households for heating or other forms of energy, and the beneficiaries are mostly defined according to their income.

In **Spain**, the issue of *hidden energy poverty (HEP)* is noted and monitored by The Ministry for Ecological Transition and the Demographic Challenge (MITECO)⁶. The term of *HEP*, which is relatively new and highlighted in recent literature, refers to those people in general, who self-restrict their residential energy consumption, which leads to underconsumption. Depending on the indicators used, they could sometimes be overlooked by the data, which focus on income only. There is, however, a relatively new consideration of indicating the share of population whose absolute energy consumption is very (abnormally) low – below half of the national median. This perspective is important – otherwise, as some examples have shown, the share of those, who are not classified as energy poor, could be quite substantial, as has been estimated in **Austria**⁷.

One of the reasons for the diversity of the definition may be linked to the variety of target groups of the measures addressing energy poverty across the countries (this may reflect different country contexts as well). The ESPN (2020) lists 13 different groups, such as, for example low-income elderly pensioners, larger households with dependent children, households living in rural areas, single-parent households, Roma people living in segregated and other marginalised communities, etc.). The list itself shows the challenges of governance at different levels (central, regional, and local/municipal) – for example, in reaching out to these groups and making sure that adequate measures are available for them.

⁵ It found that persons aged 75 or over, sole occupants, farmers, and persons with a disability lived in lowest energy-efficient dwellings. Ten per cent of households with a reference person aged 75 years or older lived in dwellings with an energy efficiency of "G" which is the lowest of the seven categories in Ireland. Eight per cent of persons living alone lived in "G" rated dwellings. Farmers at 11% and agricultural workers at 8% were the two socio-economic groups that lived in the highest percentage of "G" rated dwellings. Eight per cent of persons with a mobility difficulty lived in "G" rated dwellings compared with 4% of persons with no mobility difficulty. 7% of persons in very bad health lived in "G" rated dwellings compared with 4% of persons in very good health. While the headline figures of the report appear to identify older people living in rural areas as those living in the least energy efficient and coldest homes, the same issues seem to apply to older urban dwellers, in Dublin for instance (older working class in Dublin neighbourhoods)

⁶ MITECO (2022), [Se publican los indicadores de pobreza energética correspondientes al año 2020 \(miteco.gob.es\)](https://www.miteco.gob.es). The HEP indicator is also reported to be in use in Belgium (Bouzarowski, Thomson, 2019, p. 45).

⁷ According to findings from Austria, "a third of deprived households not classified as energy poor cope by self-restriction" (Eisfeld and Seebauer, 2022, [The energy austerity pitfall: Linking hidden energy poverty with self-restriction in household use in Austria - ScienceDirect](https://www.sciencedirect.com/science/article/pii/S0950080422000000), accessed: 10/04/2022)

There have been attempts to coordinate and advance the measurement of energy poverty at European level (European Commission, 2020a, 2020b), and these efforts are still ongoing⁸. The Commission highlights the importance of any definition having to capture all the three drivers/dimensions: income, prices, and energy efficiency. The national definitions and, consequently, the scope and depth of the policy measures, however, still differ between Member States at present. This has to be kept in mind when reading this overview of the measures applied in the countries.

A direct comparison of measures across the Member States is challenging not only because the measures vary a lot, but also because there are important differences in the context within which the support systems operate. For example, in Denmark, there is no official definition of “essential services” (the “utility services” refer to water, sanitation and energy – the latter referring to heating and electricity). There is, however, a clear distinction between support via welfare services (such as education and childcare, which are universal, but support is provided for low-income groups) and support for accessing other services: unlike welfare services, they are not free for anyone, including low-income people, and issues regarding specifically access to or costs of essential services are not considered when determining access to welfare benefits. Thus, until present, there were no specific measures (such as reduced tariffs, in-kind benefits, etc.) to facilitate access to essential services on the grounds of low-income criterion. In 2021, however, the price of electricity rose by 305%. Due to the increase in wholesale energy prices in Europe, the Danish Government has decided to introduce a ‘heat-cheque’ support measure from 2022, to help vulnerable households pay their energy bills.⁹ Similarly, **Sweden** does not have a national definition of low income in the context of essential services. Energy poverty is also not an established term in Sweden; this is due to the structure of the social insurance system, which covers costs for adequate warmth and other household- and energy-related needs, including accommodation for low-income and other vulnerable groups. The social insurance system is governed on the national level and is supported by governance on the municipal level. This means in practice that individuals can apply for social assistance from municipalities, but the structure varies from municipality to municipality. The electricity prices are regulated by the Swedish Energy Markets Inspectorate's electricity revenue framework which in turn prevents the electricity companies from charging fees that are, as it is stated in the Electricity Act, unreasonable, biased, and discriminatory. The revenue framework is regulated in advance and is valid for four years at a time.

In **Ireland**, however, certain social welfare benefits are used as a criterion, or entry point, for wider support¹⁰. In **Croatia**, currently there is no distinction between energy and general poverty in legislation, and direct payments of utility bills are the only measure of help to (energy) poor households. In **France**, two types of measures exist: supporting access to energy through financial aid

⁸ A definition has been proposed by the European Commission in the review of the Energy Efficiency Directive (EED), currently under negotiations in the Council and the Parliament. The Council Recommendation on a fair transition, adopted in mid-2022, establishes links to that.

The dashboard of indicators is currently administered by the [Energy Poverty Advisory Hub \(EPAH\)](#), which was launched in 2021.

⁹ Bruegel, 2022, *National policies to shield consumers from rising energy prices*. Available at: <https://www.bruegel.org/dataset/national-policies-shield-consumers-rising-energy-prices>

¹⁰ The two major means-tested benefits are jobseekers’ allowance and the non-contributory state pension. While the system for means testing is somewhat complex, a person will usually only be eligible for these benefits where their incomes are less than the benefits themselves. An unemployed person under the pension age of 66 will need to be in receipt of less than €208 per week and a person applying for the pension will need to be in receipt of less than €242 per week.

(Chèque énergie) and guaranteed minimum access to energy and granting financial aid for renovation in dwellings (housing).

Easing access to energy services amidst high price increase

Increases in energy prices were recognised as a challenge in many Member States even prior to 2020, when price volatility prevailed. This may contribute to the fact that it was mainly in the area of energy support services where ongoing or announced reforms could be observed in 2019 if compared to the other essential services, i.e., water, sanitation, public transport, digital communication and financial services (ESPN, 2020, p. 19).

Energy prices have been increasing substantially over 2021-2022. The consequences of the war in Ukraine have added another layer to the already increasing energy prices (European Commission, 2021c).

For example, In January 2022 in Ireland, the 12-month increase figure for "Electricity, gas & other fuels" stood at 27.4%¹¹. In Belgium, according to figures in spring 2022, the average household electricity bill has risen by more than 30% in 2021, and the average gas bill by more than 120%, while social tariffs were raised, too. The price increase was especially steep at the continent, and this explains why for example, in Sweden the electricity price increase differed geographically: in 2021, Northern Sweden was not as affected by the increased electricity prices as Southern Sweden, which saw a steeper increase because the area is more connected to the continent - making the area more affected by the prices on the continent.

The measures taken in 2020-2021 have been insufficient to outweigh the additional costs deriving from the sharp rise of energy prices, and the strengthening of social tariffs appear to be among the most preferred measures. However, to ease the impact, Member States have introduced new and/or extended their recent measures, and in many cases the previously introduced schemes for green transition were reconsidered (e.g., in Ireland: carbon tax).

Key types of measures

The measures considered in this overview include those that constitute either immediate reaction to the price increase (new measures, sometimes even temporary) or those which were in place from before 2020 but were recently modified. They include measures both directly addressing access for people on low incomes and universal measures within the context of rise in energy prices. It is notable that many of the emergency measures identified in the current overview were of universal nature¹², but there also are examples of targeted schemes that were extended (in terms of the amount allocated and/or the coverage).

In some instances, in order to better understand the country context (for example, why new measures were not introduced to such an extent as in other countries), longer-term measures are indicated even if they have not been recently changed. The categorisation in Table 1.1 (below) mainly follows the groupings used by ESPN (2020):

¹¹ Within the consumer price index, also the increase of subdivision 4.3, i.e., maintenance and repair of the dwelling which had increased by 6.7%, is also of some concern. (Central Statistics Office, 2022)

¹² See some reasons behind this tendency for example in OECD (2022), [Why governments should target support amidst high energy prices \(oecd.org\)](#) (accessed: 05.09.2022)

- Reduced tariffs
- Cash benefits
- In-kind benefits
- Basic/uninterrupted supply.

Description of details of the measures by countries (where relevant) is presented after the table.

Table 1.1: Temporary, ongoing, and planned measures supporting access to and affordability of energy services to people on low incomes: Main types (2020-early 2022)

MS/measure	Reduced tariffs	Cash benefits	In-kind benefits	Basic/uninterrupted supply
AT	1	1		1
BE	1	1		1
BG	1	1		
CY	1			
CZ		1		
DE	1	1		1
DK		1		
EE	1	1		
EL	1	1		1
ES	1			1
FI	1		1	
FR	1	1	1	1
HR	1	1	1	1
HU	1		1	
IE		1	1	1
IT	1	1		
LT	1	1		
LU	1	1		
LV	1	1		
MT	1			
NL	1	1		
PL	1	1		
PT				1
RO	1	1	1	1
SE		1		
SI	1	1		
SK		1		

Notes: '1' notes that the measure(s) of such type exist in a country (blank is for absence of measures). The measures are included irrespective of scope: both targeted and universal ones.

Timewise, the table covers the measures that were introduced or were in place during the reporting period (2020-2021/early 2022). Type-wise, note that the ESPN (2020) has distinguished a separate category of advice and informational support; in the current overview, these measures are included under the section on in-kind benefits.

Source: Eurofound (based on the inputs by the Network of Eurofound Correspondents), 2022

As can be seen (Table 1.1), the most preferred methods of support are reduced tariffs and cash benefits. Altogether, 21 countries apply these measures, respectively; in 11 countries (Austria, Belgium, Cyprus, Estonia, Hungary, Italy, Latvia, Lithuania, Luxembourg, Slovenia, Spain) even more of such measures were introduced recently. The measures regarding basic/uninterrupted supply are also in place quite widely (10 countries), whereas the in-kind benefits seem the least popular (6 countries).

The measures, even if they can be categorised, take diverse forms. One of the reasons is that in many cases, they form part of a more comprehensive programme – often as a plan for long-term (for example in **Croatia**), whereas in other countries they are single, or even one-off (often emergency) measures. In the next sections, the four types of measures (depicted in Table 1 above) are discussed and selected country examples are provided to illustrate how such measures apply in specific national cases.

Reduced tariffs

Reduced tariffs seem one of the most preferred policy reactions to the energy price increases. There are certain subcategories within this type of measures, where countries can be grouped.

VAT and other tax/duties/levies reduction

At a time of reporting in March-June 2022, VAT-reduction on electricity or fuels for domestic heating was in place in **Cyprus, Slovenia, Poland** and **Lithuania**, and was planned in **Croatia**. Other tax reductions can be seen in **Austria, Cyprus, Germany¹³, Italy, the Netherlands, Poland, Slovenia, Spain**; an excise duty reduction is planned in **Hungary**. In three countries (**Austria, Germany, Slovenia**), the reduction of taxes was intended to reduce costs for the people paying for utilities, even if financing green transition with these taxes had to be put on hold.

So, as can be seen, in many cases those taxes (VAT, excise duties, contributions to green transition and other specific taxes/duties/levies) were reduced, which had been included in the price. The price-structure reflects the proportion of taxes (for example, according to some data, the share of taxes in the final price is relatively high in Spain and Italy – Rogulj, 2022). It can also be concluded that tax cuts constitute an area where policy responses for increased market prices seemed to be the simplest and most straightforward. At the same time, all these measures have their administration costs as well as may lead to reduction in government revenue – hence many of these measures are temporary. However, even if taxes may matter as a source of revenue for the public budgets, any type of tax on domestic energy is usually regressive since the burden is relatively higher for the low-income groups. Therefore, any cuts to such taxes are distributionally progressive, even if everyone benefits to some extent.

Price freezing or price caps

These are applied in one form or another in five countries: **Bulgaria, France, Malta, Romania** and **Hungary** (in the latter, the price cap is used exclusively for diesel and petrol).

¹³ In Germany, the government adopted a decision in April 2022 that the energy tax rates for the fuels mainly used in road traffic will be reduced to the level of the minimum tax rates of the EU Energy Tax Directive (2003/96/EC) – see further details at: [Temporary reduction in fuel tax - Eurofound EU PolicyWatch \(europa.eu\)](https://www.eurofound.europa.eu/en/news/press-releases/2022/04/temporary-reduction-in-fuel-tax)

Extended coverage of previously introduced measures (which often were in regard to reduction of prices) is used as a tool for cushioning the impact of energy price increase in 4 countries: **Austria** (where this time all households became included), **Belgium** (here the measure remained targeted), **Greece, and Spain**. *Reduction of network costs (which are user contributions collected for covering the maintenance of electricity or gas network)* can be seen in **Estonia, Luxembourg, and Poland**. There are also other costs included in the final price, such as *distribution costs*, which are reduced in **Finland, Slovenia, and Latvia**. In the first two countries (Finland and Slovenia), these costs are decreased through lowering the profit rate for electricity companies, in **Latvia** – through compensation of the electricity transmission system fee and of the mandatory procurement component (OIK) from the state budget (see '[Subsidies for citizens to reduce the rise in energy prices](#)' - Eurofound EU PolicyWatch ([europa.eu](#))). To some extent, a similar measure can be seen in **Spain**, where a *reduction of windfall revenues* was introduced in respect to those companies, which gained a lot from the higher energy prices (This is also being discussed in other countries, for example, in Ireland.) The policy developments since March 2022, when this overview was being prepared, have accelerated in Europe both in search of energy supply alternatives to Russia, and in terms of addressing energy cost implications.¹⁴

To demonstrate the details of the aforementioned types of policies to reduce tariffs via taxes or freezing the prices, the selected detailed examples are provided below.

Lithuania applies a reduced VAT rate of 9% (compared to the standard VAT of 21%) on district heating. The same reduced VAT rate was extended to firewood and wood products used by households already in 2019. Due to the energy price increase, a further (temporary) reduction of VAT for district heating (to zero) was adopted for the period of January-April 2022.¹⁵ The laws are amended to allow the National Energy Regulatory Council (NERC) to spread the increase in the price of natural gas to consumers, as well as the additional component of the public supplier to the price of electricity transmission services to household consumers, for over five years. The measure does not single out specific social groups.

In **France**, the State covers the additional costs incurred by suppliers due to the price freeze. The measure prevented a substantial increase and avoided an increase in expenditure of €500 per year for a household. Another sub-measure is freezing the increase in regulated electricity sales tariffs at 4% (including tax) on 1 February 2022 for residential consumers¹⁶ (without this intervention, the increase would have reached 35%¹⁷, €300 per year for a household). The inflation allowance is paid in one go

¹⁴ For a summary of a broad range of measures to shield consumers from rising energy prices, see the continued update of Bruegel's overview: [National policies to shield consumers from rising energy prices](#) (Bruegel monitors introduction of financial support as well as for example, windfall taxes, though do not detail the measures for vulnerable groups that are in focus in this overview).

¹⁵ on 17 March 2022, the Lithuanian Parliament adopted a temporary measure of the 0% VAT rate for district heating. The 0% VAT rate was applied retroactively from 1 January 2022 to 30 April 2022: LRS (2022) 'Seimas: PVM tarifas už šildymą bus laikinai kompensuojamas'. 2022 m. kovo 17 d. pranešimas žiniasklaidai. Available at https://www.lrs.lt/sip/portal.show?p_r=35435&p_k=1&p_t=280328

¹⁶ [Décret n° 2022-84 du 28 janvier 2022 relatif à la minoration des tarifs de l'accise sur l'électricité prévue à l'article 29 de la loi n° 2021-1900 du 30 décembre 2021 de finances pour 2022 et Arrêté du 28 janvier 2022 relatif aux tarifs réglementés de vente de l'électricité applicables aux consommateurs non résidentiels en France métropolitaine continentale.](#)

¹⁷ Gouvernement, [Le Gouvernement engage des mesures exceptionnelles pour protéger le pouvoir d'achat des Français et préserver la compétitivité de l'approvisionnement électrique des entreprises face à la forte hausse des prix de l'énergie](#), Press release, 13/01/2022.

by employers to employees, who are fully compensated by the State for these payments via an aid to the payment of their social security contributions. Two other sub-measures aim to tackle the rise in fuel prices by relieving motorists. These aids are not means-tested.

In **Germany**, the revenue from the Renewable Energy Act levy is used to finance the expansion of renewable energy supply. As of the 1 January 2022, the levy dropped from 6.5 to 3.723 cents per kWh of electricity. That is a reduction of around 43 percent. Under the label of “Socially fair energy prices”, the new government has announced that they will stop financing the expansion of renewable energy supply via the electricity price as of the 1 January 2023. In the future, the financing will come from the Energy and Climate Fund (EKF), which is fed from the income from the emissions trading systems (BEHG and ETS) and a subsidy from the federal budget.

In **Poland**, many of these types of measures (reduced tariffs, price freezes/price caps) are clustered into a set of policies that the Polish government titled ‘the anti-inflation shield’. This set of measures was adopted in December 2021 and was updated twice over the course of 2022¹⁸. The energy-related measures encompass the following:

- reduction of VAT on system/ network heat from 23% to 8% in January-March 2022, lowered to 5% for the further months of 2022 by the subsequent updates of the ‘anti-inflation shield’;
- VAT reduction on natural gas from 23% to 8% in January-March 2022, lowered to 0% for the further months of 2022 by the subsequent updates of the ‘anti-inflation shield’;
- reduction of VAT on electricity from 23% to 5% in January-March 2022, later extended till the end of 2022;
- abolition of excise duty on electricity (5 PLN/MWh) for households (for other entities, a reduced rate was applied) in January-March 2022, later extended till the end of 2022;
- abolition of retail sales tax on transport fuels in January-May 2022 (the amount of the tax depends on the size of the turnover of the seller – between 0 and 1.4% of the revenue), later extended till the end of 2022;
- reduction of excise duty on transport fuels to the EU minimum (EUR 359/1000 l for petrol, EUR 330/1000 l for diesel, EUR 125/t LPG) - from 20/12/2021 to 20/05/2022, later extended till the end of 2022;
- abolition of emission charge in fuels from 20/12/2021 to 20/05/2022, later extended till the end of 2022.

In **Spain**, the electricity social voucher’s discount rate is 60% for vulnerable and 70% for severely vulnerable consumers. Due to the COVID-19 crisis, the coverage was also extended for unemployed and those persons who are affected by a temporary workforce restructuring plan, whereas in the case of self-employed, those that have reduced their working hours due to care responsibilities, or other similar circumstances entailing a substantial loss of income.

In **Cyprus**, in September 2021, it was decided to reduce the electricity price (10%-reduction for the average household consumer) to mitigate the effects of rising fuel costs and the cost of purchasing

¹⁸ Please see the website for a general public at this weblink: [Rządowa Tarcza Antynflacyjna | Chronimy polskie rodziny \(chronimyrodziny.gov.pl\)](https://www.gov.pl/web/finanse/rzad-przedluzyl-dzialanie-tarczy-antynflacyjnej-do-konca-2022-r); the 23/08/2022 information by the Ministry of Finance on extending the ‘anti-inflation shield’ till the end of 2022 – at: <https://www.gov.pl/web/finanse/rzad-przedluzyl-dzialanie-tarczy-antynflacyjnej-do-konca-2022-r>. As per decision in August 2022, Poland extended most of these measures till the end of 2022 – see more in the forthcoming updates in Eurofound’s online database *EU PolicyWatch*.

greenhouse gas emission allowances. The measure was applied for bills from November 2021 to February 2022. In addition, another measure introduced a reduction of VAT on electricity consumption from 19% to 5% in the Electricity Authority of Cyprus (EAC) tariffs. It covers a period of six months, but unlike the previous measure, which was applied to everyone, this one targeted vulnerable consumers only.

In **Estonia**, price caps were defined both for electricity and gas (the cap included the VAT)¹⁹ - up to 650 kWh per month for electricity, and up to 2.75 MWh per month for gas consumption. The measure was adopted on 5/02/2022, applied for the period of January-March 2022. Regarding reducing the district heating costs, 65% of the part of the heating bill that exceeds the level of unit price in October 2021 will be compensated to the consumer. The reduction is similar to other measures, i.e. automatic for the consumer, while the service provider can apply for state reimbursement. The measure was adopted on 3/02/2022, applied for the period of January-March 2022.

In **Malta**, the government has allocated funds to Malta's sole energy provider to address the hike in fuel prices after the current fuel hedging agreement expired in March 2022. Once these funds are exhausted, the government is hoping to have signed a new hedging agreement which would ensure fuel and energy supply at a reasonable price. The government claims that it has led to an annual average savings of €500 per household. This measure is both a by chance continuation and new. Malta's energy price stability is the result of a 7-year fuel hedging agreement that has been in force since 2015 (The objective of such an agreement is to reduce the exposure to unfavourable price changes). What is new is the government's commitment to absorb the price of higher fuel costs post March 2022, when this agreement comes to an end. Given that Malta has been benefitting from price stability, utility prices are affordable to the majority. According to data from 2020, 93.7% of the population did not report any arrears on utility bills. This measure is universal, but vulnerable individuals could also make use of the pre-existing '[Energy Benefit](#)'. During 2020, 5,993 persons received Energy Benefits. (Malta has been relatively unaffected by the rising energy price of liquified natural gas which is used to operate its power stations.) After March 2022, Malta must buy its required gas at the current market rates.²⁰ In February 2022, the government claimed that households would have witnessed a €500 increase to their energy bills during 2022 if the government had not intervened in October 2021 to freeze future energy prices. In April 2022, Malta signed new agreements "to lock in prices <for a substantial volume> of the country's supply of Liquified Natural Gas" (LNG). According to this deal, the state energy supplier is to set the price of varying volumes of gas at different rates, with the objective of the government to keep utility bills stable and absorb the impact of possible price increases²¹.

Italy introduced specific measures aimed at reducing the impact of energy price increases on household bills in 2021 (the conversion law of decree-law no. 73 of 25/05/2021 (passed in July 2021) and the decree-law no. 130 of 27/09/2021, the 2022 Budget Law and decree law no. 17 of 01/03/2022). They contained some general measures, essentially to contain payments connected to system expenses and taxes, and specific initiatives to increase the funding of energy bonuses, which were temporarily applicable for one specific quarter. The measures targeted the "households in need"

¹⁹ It was 12 cents per kWh, which does not include the cost of network service, excise duty or renewable energy charges. In case of gas, price ceiling is 6.5 cents per kWh or €0.6792/m³.

²⁰ See: Times of Malta, 21/11/2021, Energy prices to be frozen in 2022 as gas crisis looms, at: <https://timesofmalta.com/articles/view/energy-prices-to-be-frozen-in-2022-as-gas-crisis-looms.916353>

²¹ [Malta signs new deals to lock in price of LNG \(timesofmalta.com\)](#) (accessed: 03/08/2022)

(defined in legislation), including households receiving the citizenship income – they are also covered by the energy bonuses.

In **Belgium**, the national social tariff for gas and electricity was extended to cover those households, which are eligible for the ‘enhanced repayment of health care’. This repayment is granted to all households below a certain income threshold – irrespectively of the sources of income. This criterion covers approx. 880,000 households (17% of the population). Prior to the extension of coverage, the number of *eligible* households for the social energy tariffs was 445,000. In principle, the social tariff is granted *automatically*, so as to minimise non-take-up. The social tariff is identical throughout Belgium, regardless of the region where one lives and the energy supplier or network operator. At the federal level in **Belgium**, the policy debate is on-going about the more radical measures than social tariffs applied so far, for example reduction of VAT rates from 21% to 6% versus more flexible or selective measures.

In **Greece**, because of expansion of coverage of various measures (such as heating allowances), the government estimated that the number of beneficiaries would exceed 1 million in 2021, compared to 700,000 in 2020. The discount on natural gas was raised from 16% to 40% for the period of October–November 2021, to €34 per thermal MWh in December of the same year. The discount was €11/MWh in October and €16/MWh in November. Household consumers saw an additional reduction of an average of €15 per thermal MWh resulting from the network use charge suspension for November and December 2021. Overall, the household discount is €31 per thermal MWh in November and €49 per thermal MWh in December. The government-owned Public Power Corporation (PPC) also expanded its existing discount policy to fully cover the price rise for the average household with a consumption of up to 600 kWh per month; special discounts were given to older people (8%). Moreover, as part of one-off special aid measure (introduced in December 2021 and administered by the Ministry of Environment and Energy) for reconnecting electricity supply to those who were disconnected due to inability to pay, the government covers the reconnection fees and takes over part of the household debt²² (see more in the section on Basic/uninterrupted supply, below). Other than that, a subsidy for selling price of diesel was introduced in Greece, but only for April 2022. Further on, a direct fuel subsidy to low-income citizens was also applied to cover one part of the price increase for three months (April, May, June 2022). This measure, however, was targeted at low- and middle-income households: the beneficiaries are individuals, tax residents of Greece, with a declared family income of up to €30,000.²³

²² The amount of the special aid will be structured as follows: For total debts of up to €6,000, the entire debt will be paid once; for total debts of more than €6,000 and up to €9,000, 75% of the debt will be paid once; for total debts over €9,000 and up to €12,000, 50% of the debt will be paid once; for total debts over €12,000, 30% of the debt will be paid once; the remaining amount will be paid by the consumers themselves in interest-free monthly instalments. Pertinent legislation: [Joint Ministerial Decision Αριθμ. ΥΠΕΝ/ΔΗΕ/70697/861/2020, Government Gazette 3088/B/24.07.2020](#); [Joint Ministerial Decision Αριθμ. ΥΠΕΝ/ΔΗΕ/124788/2150, Government Gazette No. 6302/29.12.2021](#); [Joint Ministerial Decision, Αριθμ. ΥΠΕΝ/ΔΗΕ/52001/1821, Government Gazette No.2567/24.05.2022](#).

²³ Source: [Subsidy for fuels for low- to medium-income individuals and taxi services - Eurofound EU PolicyWatch \(europa.eu\)](#)

Cash benefits

Cash benefits for cushioning high energy costs constitute one of the most frequently applied measures, similarly to previous years (it used to be “by far the most common measure”, according to the ESPN (2020)). Understandably, amidst rising energy prices, *extended coverage* and/or *increased amount* (of the benefits) is widely applied: in **Czechia** (coverage and amount), **Greece** (coverage and amount), **Italy** (increased amount), **Lithuania** (coverage), **the Netherlands** (extra amount for lower-income groups). In **Croatia**, there are plans for increasing the scope and amount for the firewood grant which has existed before. Measures which could be considered as *new (even if temporary)* can be seen in:

Austria (Energy cost compensation voucher – temporary, high-income groups are not eligible²⁴; inflation compensation – also temporary, targeted), **Bulgaria** (lump-sum financial support for heating for vulnerable individuals/families), **Denmark** (targeted heating cheque²⁵), **Estonia** (means-tested reduction of energy costs – a temporary national measure), **France** (inflation allowance), **Germany** (a 10% increase of the housing benefit, according to Act to Reduce Burdens of Heating Costs in the Housing Benefit in the Context of CO2 Pricing), **Ireland** (Electricity Costs Emergency Scheme²⁶), **Latvia** (new temporary, targeted measures), **Luxembourg** (energy bonus for low-income households), **Poland** (“shield allowance”), **Romania** (Aid for heating the home and aid for energy consumption – targeted), **Slovenia** (one-off Solidarity Allowance – targeted²⁷), and **Sweden** (electricity price compensation).

The current findings confirm the previous ones (by ESPN 2020): national-level measures are most common (even if in some cases applied via local governments, such as in **Estonia**). Some measures are part of a bigger package (for example, in **Belgium**, **France** **Romania**, and planned in **Croatia**). Even if cash benefits were used frequently previously, there are many new measures, which in most cases are temporary.

To demonstrate the details of how the cash benefits are designed, the selected examples are provided below.

Estonia introduced a measure that targets disadvantaged families (adopted in November 2021). Households with an income per member below the median income are reimbursed 80% of the total energy price, which exceeds 120 € / MWh (for electricity, 49 € / MWh for gas and 78 € / MWh for district heating). The measure is applied via local governments. The reimbursement is not linked to receipt of any social benefits, but to the household income.

The **Czech** government considered increasing the “standard costs” for housing allowance further, exceptionally in 2022.

In December 2021, **Croatia** accepted a Programme to combat energy poverty, including the use of renewable energy sources in residential buildings in assisted areas and in areas of special state concern for the period till 2025 (OG 143/21). The Programme covers renovation of buildings only in the assisted and special care areas, where residents are not able to participate in financing necessary repairs, especially in energy renovation. Co-financing and implementation of the Programme will be provided from the funds of the Recovery and Resilience Mechanism through the National Recovery

²⁴ [Energy costs compensation voucher - Eurofound EU PolicyWatch \(europa.eu\)](#)

²⁵ There has been a recent extension of the amount of the heat cheque for economically vulnerable groups. See: [Extension of heat check subsidy for economically vulnerable groups - Eurofound EU PolicyWatch \(europa.eu\)](#)

²⁶ [Electricity Costs Emergency Benefit Scheme for all Irish households - Eurofound EU PolicyWatch \(europa.eu\)](#)

²⁷ [One-time subsidy for energy bills of low-income households - Eurofound EU PolicyWatch \(europa.eu\)](#)

and Resilience Plan 2021-2026 and from the state budget. The Central State Office for Reconstruction and Housing oversees implementing the Programme. On 26/01/2022, the Prime Minister announced that the government would maintain and improve social inclusion through three segments and protect the most vulnerable in Croatian society, particularly regarding the energy poverty. The first activity is to adopt *a new regulatory framework where the scope and the amount of the firewood grant benefit* (a measure which has been in place for a long time) would *be increased*. The second part of the package refers to the consideration of fees, which determine the price of gas or electricity. The third element considers the changes in the tax policy.

In several countries, the concept of “protected consumers”, or vulnerable customers is applied (e.g., in Hungary, Latvia, Lithuania, Romania). As an illustration, below is an example for its coverage/definition in Latvia (see Box 1).

Box 1: The concept of ‘protected consumer’: its origins and extension of its coverage in 2022 – the example of Latvia

In Latvia, the special policy for people in need was introduced from 2015, after the liberalisation of the Latvian electricity market (Amendments to the Electricity market law, 2014). Before this date, household electricity tariffs had been lower than the market price of electricity. After the liberalisation, the household electricity prices significantly increased. It was then, since January 2015, when the concept of a ‘protected consumer’ was introduced, to support groups in vulnerable situation.

The coverage of protected customers was extended in 2022 to the following categories: low-income households (persons), a large family, a family (person) who cares for a child with disability, a person who falls into a certain group of disability (called disability I), and uses electricity for final consumption in his/her own household (Electricity market law, Section 1 (2) 2).

Access to energy sources (gas, firewood, centralised heating, etc) was facilitated to certain social groups even before that, and that was managed through the household allowance (Law on assistance in solving apartment matters, Section 1, para 5; (2001), Law on social services and social assistance, Section 35 (1) 2), 2002).

Source: Eurofound (based on inputs by the Network of Eurofound correspondents), 2022

In-kind support

At the first sight, in-kind support seems a somewhat less popular reaction to the price increase than the other measures: they were found in a total of 6 countries (in Romania, 2 in-kind support schemes were noted). At the same time, it has to be acknowledged that in-kind support could be a complementary part of another measure. For example, in Greece, the provision of the weekly information and telephone line (both in-kind support measures) help consumers at risk of a power-cut or an actual power cut due to failure in paying their debts for electricity (therefore this measure is intricately linked to the broader measure of securing continuous supply – see this measure listed in that category). Unlike an earlier reporting of in-kind support at regional/local level (see ESPN, 2020, p.70), this time, mainly central-level measures were identified. This may be linked to the fact that many of the measures are of emergency types. Of all the in-kind support measures, apart from the measure in Greece mentioned above, in 2 other countries information and advice are provided: in Romania and Croatia – in both countries the aim is to combat energy poverty, and in Croatia, it is part

of a bigger programme and, similarly to Greece, it supplements the financial support to energy consumers. There are 2 measures which are linked to access and affordability: in Romania, a new emergency decree of October 2021 made it possible for vulnerable consumers to defer payment of their bills for a period of one and six months at no extra cost. In France, the broad scheme of the “Chèque énergie” sets up the right to protection on electricity and natural gas contracts – this means that there no connection fees apply when moving house. All the other 4 schemes are special ones: in Ireland, it is linked to renovation - the “Better Energy Warmer Homes” scheme, which is an existing measure, has recently been extended and it makes possible a major free energy upgrade arrangement targeting low-income households. In Finland, the measure concerns work-related travel and how it is taxed: there is an increase in the maximum tax reduction for this travel from the earlier EUR7,000 to EUR8,400. According to estimates, this may affect 570,000 taxpayers. Another similar in-kind benefit is under consideration: make park-and-ride parking in work-related travel tax deductible.

The in-kind benefit measure of “welfare fuel support” has been in place in Hungary for a long time (since 2011), and the number of beneficiaries has recently been increased: according to estimates, 180,000-190,000 households received the support in 2021. This measure provided directly through municipalities with a population of less than 5,000, and the funding (emanating from the state budget) is used to purchase fuel (firewood and lignite), which is distributed to households in need according to locally defined criteria. The local decree must stipulate that the distribution of the fuel must prioritise those getting old-age benefits, or income supplement from the municipality or families getting benefits for looking after their underprivileged children. Since 2016, the maximum amount to be requested is determined centrally, considering the number of people in the public works scheme, and the number of inhabitants aged 80+. In October 2021, more than 2,300 municipalities successfully applied for the social fuel tender, issued by the Ministry of Interior. Municipalities may also provide such support for those in need irrespective of this central programme.

Although the reported instances of using in-kind support were not numerous, such support is an important measure in terms of targeting groups in disadvantaged situations. As seen in examples presented, this type of support could even play a crucial role in the specific case of easing access to the very basic energy services. However, the policy makers in 2022 also began looking into options for other types of basic support, such as granting priority access to energy services in potential crises, which might eventually affect the evolution of concept of essential services at national level (see Box 2).

Box 2. Considerations on priority access to energy services.

Until recently, the essential services were mostly considered at national level in terms of ensuring service continuity and limiting the options for industrial action (strikes) (Mironi, Schlachter 2019). Typically, essential services with such limitations were identified in the area of statutory services (police, army, rescue) and sometimes transport or welfare services, and involved public sector workforce. Following the recent developments around energy services discussed in this report, new reflections by policymakers are emerging around strengthening the preparedness for crises and enabling the essential services.

The challenges over the 2022 provided strong impetus for the Member States to prepare for various scenarios around potential disruptions in energy supply. The factors included the protraction of Russia’s war in Ukraine, the decrease of or cut in supply of gas by Russia to some Member States (including stoppage of Nord Stream 1 in mid-July and early September), as well as high market prices of oil and the planned reduction of purchasing oil from Russia as part of EU’s sanctions. With some

emphasis in communication that the worst-case scenarios are not expected to actually happen, some governments were working out plans on rationing the fuels as well as on establishing the essential worker categories that would have priority access to fuel in case of severe shortages. For example, see:

Reuters, '[Factbox: The three stages of Germany's emergency gas plan](#)' (online article, 23/06/2022)

Bray J., '[Fuel rationing: Essential workers to get petrol station priority if winter shortages occur](#)', *The Irish Times* (online article, 14/07/2022)

Addressing similar concerns is reflected in the EU initiatives such as REPowerEU, which aims at saving energy, diversifying energy sources, and accelerating the transition to clean energy; it also emphasises that contingency measures in case interruptions to supply may be needed.

Such developments are likely to further influence the understanding of essential services at national level and raise the practical importance of the concept – possibly beyond the services addressed by Principle 20 of the EPSR. The clarity around prioritisation in case of necessity, and the readiness to sustain key services and assist groups most in need could be helpful for the overall resilience to crises.

Basic/uninterrupted supply

The measures to secure uninterrupted supply can be seen in 11 countries: Austria, Belgium, Croatia, Germany, Greece, Hungary, France, Ireland, Portugal, Romania, and Spain.

The government in **Portugal**, in the background of the COVID-19 pandemic, decided on having an exceptional temporary measure *Guaranteed access to essential services – supply of electricity and natural gas* (introduced on 07/07/2021, amended on 23/12/2021) so that these services could not be suspended for the period till 31/03/2022. In case of debts, a payment plan adequate to the current income of the consumer must be drawn up (within a reasonable time).

In **Romania**, according to a new decree for the Protection of the vulnerable consumer²⁸, it is forbidden to disconnect the places of consumption from the electricity network, where vulnerable consumers live. However, there is no official register for identifying a number of the vulnerable clients. According to the January 2021 press-release by the National Authority for Energy Regulations (ANRE), more than half of Romania's household electricity consumers, more than 4,5 million persons (the total number of consumers in Romania is 8,7 million), fall into the category of vulnerable consumers, with an average consumption of 55 kWh per month.²⁹

In some cases (where measures have been in place previously according to the ESPN, 2020), the COVID-19 context seems to have played an important role. For example, in **Ireland**, where the government instituted a blanket ban on disconnections at the beginning of the COVID-19 crisis (this was, however, lifted in June 2021). In **Austria**, however, the measure used during COVID-19 pandemic (*Continuous supply of electricity and gas*) was reintroduced in late 2021/early 2022. So, it was in force from March-June 2020 and 23 December 2021 - 31 January 2022. The measure guarantees electricity

²⁸ [Emergency Ordinance No 27 of 18 March 2022](#) on the measures applicable to end users in the electricity and natural gas market during the period from 1 April 2022 to 31 March 2023.

²⁹ <https://www.anre.ro/ro/presa/comunicate/comunicat-de-presa-06-01-2021>

and gas supply for household customers and small businesses, who have problems with paying their energy bills. It is a temporary measure (an agreement concluded originally on 25/03/2020 between the Federal Ministry of Finance and the associations of electricity and gas companies).

In **France**, however, an entirely new measure was launched on 1 April 2022, called *Fin des coupures d'électricité* (*An end to power cuts*). Unlike previously, this new measure is applicable to the whole year (not just for the winter period) in case of unpaid bills. It replaces the power cuts with a limited amount of power supply³⁰, and it is applicable for all, unless technically not possible. This means that a minimum service will be maintained while waiting for the customer to regularise their situation, with the energy bills remaining due. If necessary, EDF (the main electricity supplier, which launched the programme) puts in place solutions to facilitate payment. A similar measure existed in **Germany**, called "*Right to refuse payment*", which, among other services of general interest, also concerned the supply of energy to prevent hardship for those who are unable to pay due to disruptions caused by COVID-19 (for example, due to job loss). This COVID-specific temporary measure, was however, stopped.

In **Spain**, within the framework of the social vouchers, a non-suspension of supply for vulnerable consumers (who are eligible for the social vouchers) was introduced, and it was planned to last until 28 February 2022.

Croatia's amended Electricity Market Act (last modified on 30/05/2019) stipulates that the distribution system operators have to establish and maintain a register of vulnerable customers (potentially, this could serve as an administrative source of data on energy poverty). It also defines that a protected customer has the right to be supplied with a certain amount of electricity in the event of a crisis. However, so far it has not been defined who belong to the group of 'protected customers'.

In **Belgium**, the regional authorities introduced temporary bans on cutting off energy supply to consumers around the end of 2020, for the period that extended into 2021. In Flanders, in assistance to households using energy loans from Flemish Government (selected low-income groups not limited to social benefit recipients), the *automatically granted delay of 3 months for repayment of energy loans from the Flemish Government was introduced for the period of April-July 2020*. The loans are limited to €15 000, with a repayment period of 10 years. Later in 2020, the *Flemish temporary ban on cut-offs or limitations of delivery through budget/prepayment meters* was introduced to ensure continuous supply to users with payment problems for the periods of November 2020 – February 2021 for cut-offs; November – December 2020 for limited delivery.

In **Belgium's** Walloon region, there was also a ban on cut-offs introduced for a similar period (*Walloon temporary ban on cut-offs or new budget/prepayment meters*) as well as a possibility of continued delivery when limit of budget/prepayment meter is reached. The measure was in place in November 2020 - March 2021. Clients in a situation of 'energy precarity' were eligible. Another measure was targeted to households with a "*Temporary suspension of the obligation for Walloon households with budget meters to prepay next delivery period* during March-June 2020. Also, a scheme entitled *Protected client status for Walloon unemployed or social assistance recipients with payment arrears* was introduced in September 2020 (extended until 31/22/2021). According to another measure, the households that had budget/prepayment meters and had payment problems were eligible for a *one-off Walloon premium €100 for electricity & €75 for gas* in 2020 (Under the Decree of Walloon Government of 20/06/2020). Also, a one-off support was introduced for the temporarily unemployed

³⁰ 1 kVA (Kilo-Volt-Amperes), which is 0.8 kW (source: [The Difference Between kW and kVA | Power Electrics](#) – accessed: 16/08/2022).

people (again, for households with budget/prepayment meters) in autumn 2020: it was a *Walloon premium of €50 for electricity and €150 for gas*.

In the Brussels Capital Region, a *Temporary ban on cut-offs (gas and electricity)* was also introduced from March 2020 until May 2021. During the periods of legal bans implemented by the regional governments in **Belgium**, there was a sharp decline in the number of cut-offs. However, as soon as bans expired, the numbers soared again: in the Brussels Region, for example, 30% more cut-offs took place during the Summer of 2021 than in the same period in 2019.³¹

In **Greece**, if a request is submitted through the telephone line established for helping the vulnerable customers in case of a power-cut (mentioned above)³², the requests for reconnection are examined immediately, and the competent authorities will cover the reconnection cost for citizens whose requests will be approved. The budget for this extraordinary support will amount to €40 million and will be provided by the Energy Transition Fund. The measure foresees the reconnection cost and debt assistance to those who were disconnected until 31/03/2022. Regarding eligibility, the request for reconnection must concern the main residence, meet specific income criteria for the beneficiaries; also, the value of the real estate must not exceed €120,000 for a one-person household, plus €15,000 euros for each member with a maximum of €180,000. It also stipulates that the household must not have had any luxury expenses based on their declaration (e.g. yachts, private school tuition, housekeepers, etc.)³³. For the context, a number of consumers that cannot pay their electricity bill even by settlement kept increasing in 2022, as was the number of "orphaned" electricity meters, i.e. consumers who, due to accumulated debts, cannot find a provider (according to unofficial market data for the first quarter of 2022, 19,000 electricity meters were passed over for the universal service provision by the government-appointed provider, increasing the total number from 148,000 at the end of 2021 to 167,000³⁴).

Germany introduced a *Right to refuse payment* in the first half of 2020, to protect consumers from cuts in provision of services of general interest (including energy) because of the COVID-19 pandemic. The measure has been stopped, and it remains to be seen whether it would be restarted, this time due to rising energy prices, or other measure would replace the COVID-specific measure.

³¹ Observatoire de la santé et du social de Bruxelles, *Mesures d'aides pour les ménages en situation de précarité énergétique en Région bruxelloise*, mimeo, February 2022.

³² The Energy Solidarity telephone line for information and for requesting the reconnection is under the supervision of the Ministry of Environment and Energy and operates Monday to Friday, 08:00 - 20:00. According to the legislation in force since 2011, residential and commercial electricity consumers whose contract has been terminated and are inactive in changing or finding a new one, are supplied with electricity from the so-called universal service. In this category the tariff is set by the Energy Regulatory Authority (RAE) and is approximately 12% more expensive than the average market tariff. Until 2019 it was assigned by law exclusively to the PPC. The regime was reformed so that the service is awarded through a competitive process carried out by RAE and in the event of no interest, to the five largest suppliers based on shares and in proportion to the number of meters each represents. After an unproductive tender, RAE awarded Universal Service tasks for the period June 2020 – June 2022 to the five largest providers, namely PPC, Protergia, Elpedison, Hron, and NRG.

³³ [Joint Ministerial Decision Αριθμ. ΥΠΕΝ/ΔΗΕ/124788/2150, Government Gazette No. 6302/29.12.2021](#); [Joint Ministerial Decision, Αριθμ. ΥΠΕΝ/ΔΗΕ/52001/1821, Government Gazette No.2567/24.05.2022](#).

³⁴ Source: <https://www.cretalive.gr/oikonomia/ekatontades-entoles-gia-diakopi-ilektrodotisis-kathe-imerai-oi-protos-dikes-kata-ritras> (accessed on 01/09/2022).

In **Ireland**, each energy supplier must have a Code of Practice for Vulnerable Customers, which prescribes how the suppliers should engage with these customers. This includes banning disconnection during the winter months (1 November - 31 March) for non-payment of bills; suppliers must ensure that all registered vulnerable customers are on the most economic tariffs available, etc.³⁵

As can be seen from the Table 1.1, apart from the Reduced tariffs and the Cash benefits, the measures of securing a basic/uninterrupted supply can be regarded as one of the most significant targeted measure types, and they were applied to support people who lost their jobs or had difficulties making ends meet. Ensuring supply or addressing payment challenges can help not only easing immediate social hardship, but also preventing household over-indebtedness since arrears on utility bills constitute an important source of indebtedness.

³⁵ Source: [Commission for Regulation of Utilities - Customer Protection](#) (accessed on 29/07/2022)

New measures facilitating green transition: Further impetus from rising energy prices

The increase in energy prices – related to the rising costs of imported fuels still widely used in the Member States – could give a further impetus to introduce measures for reducing dependence on fossil fuels³⁶. Therefore, another main group of measures that will shape access to, and use of specific energy services are those where the main aim is to facilitate green transition. These are often linked to short-term (temporary) measures to address the rise in energy prices, but there are others, which are planned for longer term. The schemes also follow the provisions in the Energy Efficiency Directive (EED) of the EU, on Achieving Energy Savings (Article 7). The measures in the Member States include the following categories:

1. Household retrofitting schemes
2. Improving energy efficiency
3. Various other incentives/support for green transition

As can be seen in Table 1.2 and a more detailed description below, a number of countries target these measures directly to vulnerable groups (Belgium, Cyprus, France, Greece, Ireland, Lithuania, the Netherlands, Portugal, whereas there are plans for targeting in Croatia). In many of these cases, and in case of some non-targeted measures, the policies often focus on the state of the buildings, and, understandably, on houses supplied with obsolete energy systems – the beneficiaries are not always individuals, but rather housing associations often managed by cooperatives (for example, in Estonia). In the cases, when there is no explicit targeting of vulnerable individuals/households, people with low-income can benefit from such measures since they tend to live under substandard housing conditions (in old houses/apartments). However, even if the take-up of these measures by vulnerable groups could be regarded as satisfactory, there could be some groups (living for example in remote, rural areas), who are not eligible. So, their high energy dependence may not be tackled³⁷.

³⁶ However, as has been shown in this chapter, in certain cases the efforts to facilitate green transition were put on hold (for example when levies collected for building up renewable energy facilities were reduced).

³⁷ Regarding the need to shift the focus to reducing energy dependence, see: Dubois, Hans (2022a) '[Shifting the focus from energy subsidies to reducing energy dependence](#)' (accessed: 29/07/2022)

Table 1.2: Overview of measures facilitating green transition

Reduction/Increases of taxes for promoting green transition	Household retrofitting schemes	Improving energy efficiency	Various other incentives/support for green transition
SE: tax deduction for green technique (since 01/01/2021). A permanent measure (until further notice), which replaced the previous solar cell support (stopped in Dec. 2020).	IE: a series of household retrofitting schemes, and a series of grants for any household carrying out retrofitting work	SK: RRP & legislation planned for improving the energy efficiency in households.	DK: Tax benefits for electric car charging
DK: Green reorganisation of heating taxes (in force since 01/01/2021). Aim: incentivise switch to renewable heating by making it cheaper.	FR: <i>MaPrimeRénov'</i> : designed to encourage households to carry out energy renovation work in their homes	PT: Efficiency vouchers	FR: <i>Ban on renting out homes with high energy consumption</i> (Interdiction à la location les logements dits passoires énergétiques)
	AT: <i>Renovation cheque for thermal insulation; Get out of oil and gas</i> " (facilitating the replacement of fossil heating systems to sustainable heating systems)	HR: Energy Efficiency Act stipulated elaboration of National Energy Efficiency Action Plans (NEEAPs) to create energy saving conditions and address energy needs.	DE: Under discussion (plans): property owners will have to cover part of the heating costs, the percentage depending on how climate-friendly the building is.
	PT: <i>Support Programme for more Sustainable Buildings.</i>	LT: Targeted measure: support for use of renewable energy sources (solar) for the electricity needs of deprived persons and/or for the replacement of fossil fuel heating installations (2021-2022)	HR: Energy Poverty Reduction Program: Financial Support

	CY: Sponsorship Plan "Saving - Upgrading the Homes"	CY: Grant scheme for the replacement of energy-intensive electrical appliances in homes of vulnerable consumers of electricity	FI: Government funding to compensate for scrapping of peat production machinery (Temporary and new)
	EE: Reconstruction grant for small residences	RO: Aid for the purchase of energy-efficient household equipment, as the 3 rd measure within the package (targeted measure)	BE (Wallonia): Simplified subsidy scheme for small energy-saving investments
	LT: Support for housing renovation and heating boilers, 2021-2022	NL: Extra money for insulation measures for vulnerable households for the year 2022	MT: <i>Eco-reduction</i> : an award (a discount) to consumers staying below a certain level of electricity and water consumption

Source: Eurofound (based on the inputs by the Network of Eurofound Correspondents), 2022.

Modification of taxes for promoting green transition

The examples of designing taxes to encourage desirable developments were noted in Denmark and Sweden.

In **Sweden**, a support measure for installing solar cell systems was modified in 2021: the Swedish Tax Authority grants a deduction of up to 15% on costs of materials and installation of the solar cells for strong own-produced electricity energy, and the support for charging poles for electrical vehicles is 50%. The reduced tariffs are designed in the same way as the Swedish tax reduction system for services in homes, meaning that the reduction comes into effect directly when one receives the invoice for the installation and materials (individuals do not need to apply for it). The target groups are house or apartment owners. This means that households that rent their house or apartment are not eligible for the tax reduction. Although the support for solar panel installation used to be 20% under the former policy, the big difference now is that people do not have to apply for the support. Instead, the company installing the solar panels sends a bill where this reduction is taken into consideration and then they get paid by the Tax Authority³⁸. By way of commentary, the old system was considered ineffective because the waiting times were long. It could take a year for the consumer to get a decision about the support. Also, the budget was predetermined, and it led to situations where there was not enough money to pay the support for everyone that qualified for it and the Government had to invest extra on the support³⁹. Now that it is a tax reduction, the budget is no longer predetermined.

In **Denmark**, there is an aim to form a new heating tax system. The measure increases the tax rate for fossils fuels, from 56.7 DKK/GJ to 62.3 DKK/GJ and aims to reduce the rate for the electric heating tax from 0,15 DKK/kWh to 0.004 DKK/kWh for businesses and 0.008 DKK/kWh for households (equivalent to the EU minimum rates).

Household retrofitting schemes (often directly linked to green transition)

Incentives in the area of retrofitting are applied across a large number of Member States.

A series of household retrofitting schemes in **Ireland** run through the Sustainable Energy Authority of Ireland and funded by the national government. This agency and its programmes are a central point of Ireland's planned transition to a low carbon country. In addition, there are a series of grants for any household carrying out retrofitting work such as additional attic insulation, installing photovoltaic solar panels, installing a heat pump etc. These are general schemes that involve the participants paying themselves and receiving some financial support. Funding for these grants was increased in the last budget. There was also a "one stop shop" scheme announced, which is launched in 2022: the Home Energy Upgrade Scheme is managed by the Sustainable Energy Authority Ireland (SEAI). An SEAI project manager coordinates with contractors for the series of upgrades that are approved.

In **France**, the *MaPrimeRénov'* is designed to encourage households to carry out energy renovation work in their homes. The amount of aid is calculated according to the income of the beneficiaries, based on four income categories, and the energy gains made possible by the work. It was introduced in January 2020 (it replaces two previous measures) and became updated within the framework of *France Relance* (programme supporting recovery from COVID-19). It has become the main state aid

³⁸ See:

<https://www.skatteverket.se/privat/fastigheterochbostad/gronteknik.4.676f4884175c97df4192860.html>

³⁹ See: <https://www.di.se/nyheter/solcellspengarna-slut-om-nagra-veckor/>.

for energy renovation. Since 11 January 2021, it is open to all homeowners, regardless of their income, and irrespective whether they are occupants, lessors, or co-owners⁴⁰. A further change (expansion) of this measure is implemented from 15 April 2022: a €1,000 increase in support for any change in the heating system that allows a shift from fuel oil or gas. Its sub-measure, called *MaPrimeRénov' Sérénité*, targets specifically low- or very low-income households. This is an advisory service⁴¹ and financial aid to support energy renovation for the eligible households. For very low-income households the measure can cover up to 50% of the total amount of the work excluding tax, with a maximum aid of €15,000. In addition, those concerned can also benefit from cumulation with the Energy Savings Certificates (*Certificats d'Économies d'Énergie* - CEE) from 1 July 2022 (as a supplement to the *MaPrimeRénov' Sérénité* aid). As part of the policy for making homes more energy efficient, the *Energy saving certificates (CEE)* have already been in place since 2005. The scheme is now in its fifth period (2022-2025). The measure makes it possible for the energy suppliers ("obliged parties") to offer financial aid to individuals to finance energy saving work partially or fully in their homes. So, in this way, they can obtain an Energy Savings Certificate (CEE) for standard work. The amount of aid offered takes into account the extent of the energy savings achieved and the beneficiary's income.

Austria used to have a *Renovation cheque check for thermal insulation* scheme in 2009-2018 and re-introduced it in 2020 and further extended in 2021. The renovation check applies to private individuals in single and two-family houses or terraced houses and supports thermal refurbishments in private residential buildings that are at least 20 years old. Comprehensive refurbishments (according to a specifically defined "klima-aktiv" standard or good standard), as well as partial refurbishments that lead to a reduction of the heating requirement by at least 40% are eligible for funding. The eligible costs consist of the costs for the material as well as for planning (e.g. energy certificate) and assembly. The funding is awarded in the form of a one-time, non-repayable investment cost grant. Funding is limited to a maximum of 30% of the eligible investment costs. A maximum annual budget has been allocated to the measure; if it is exhausted, no further funding is available. As reflected in the eligibility conditions, the refurbishment support is aimed at (co-)owners and those living in houses⁴², thus it means that it rather targets middle- to high-income groups than low-income groups. Another measure, with a similar purpose, focuses on heating, and is called "*Get out of oil and gas*". It is intended to facilitate the replacement of fossil heating systems to sustainable heating systems. Eligible for a payment is the replacement of a fossil heating system (oil, gas, coal/coke burners and electricity-operated night or direct storage heaters) with a new climate-friendly heating system; funding is primarily provided for connection to a highly efficient or climate-friendly local/district heating system. If this connection is not possible, the changeover to a wood-fired central heating system or a heat pump is also promoted. The upper ceiling of payments lies at €7,500 (it used to be at €5,000 before it was raised in October 2021); up to 50% (before October 2021: 35%) of the investment costs are being compensated. A surcharge of €2,000 is paid for the replacement of a fossil heating system by a highly efficient local/district heating in a town centre in areas supplied with natural gas. The measure is available to (co-)owners, building owners and tenants of one/two-family houses or terraced houses

⁴⁰ It aims to finance the renovation of 400 to 500,000 homes per year and has an additional budget of €2 billion for 2021 and 2022.

⁴¹ A professional from a specialised association or a design office could, for example, help applicants to adapt their project to the characteristics of their home and their situation. The professional will provide assistance with diagnosis of the dwelling, definition and costing of the project, taking steps to obtain all the financial aid to which applicants are entitled.

⁴² I.e. owners as well as those authorised to build and tenants of a detached and semi-detached house or terraced house. Special funding criteria apply to buildings with three or more residential units.

and building owners or their authorised representatives (e.g. property managers) for multi-storey residential buildings with at least three residential units.

As a part of the Economic and Social Stabilisation Programme in **Portugal**, the *Support Programme for more Sustainable Buildings* was approved in June 2020, and the deadline for applications was extended until March 2022, though the programme will run out when the planned budget is exhausted. It aims to finance measures that promote rehabilitation, decarbonisation, energy efficiency, water efficiency and the circular economy, contributing to the improvement of the energy and environmental performance of buildings. This measure is intended for houses built before 2006.

Cyprus's Sponsorship Plan "Saving - Upgrading the Homes" (announced already in 2020) is a new measure with an aim for an extensive energy upgrade of existing homes. The sponsorship covers 60% of the approved budget of each application (for the homes of vulnerable consumers the sponsorship increases to 80%) and can cover costs related to thermal insulation of the house shell, replacement of frames, installation of shading systems as well as the installation and / or replacement of technical systems (such as solar, photovoltaic, air conditioners, storage batteries, control systems, etc.). Another measure with a somehow similar purpose was introduced also in 2021 (although with a retrospective effect applicable even for investment since June 2020 and houses of which their application for a permit was submitted before 21 December 2007). Although the measure was in effect until 20 December 2021, the Plan has been included in the proposals for possible funding from the Recovery and Resilience Facility. The measure covered not only insulation, but also installation of photovoltaic system. The third measure with similar objective is called '*Sponsorship Plan for installation or replacement of solar hot water production systems in homes for the year 2021*'. It was a new measure that ran during April- August 2021. It covered two categories of investment: a) Installation or replacement of an integrated solar water heating system (cylinder and solar panels). In this case the sponsorship amount was €350, and b) Installation or replacement of solar panels only. The sponsorship amount was €175. Natural persons were eligible for the support.

In **Estonia**, *Reconstruction grant for small residences* was introduced originally in 2016 and was modified in 2020. The aim of the support is to achieve energy efficiency and a better indoor climate in small houses, to reduce energy costs and to encourage the use of renewable energy. In 2020, the maximum amount was increased from €15,000 to €20,000. With thorough reconstruction, the size of the grant depends on the specific location and is between 30% and 50% and a maximum of €30,000 - €50,000. Previously, regional differences were not applied. Changes in 2022 are envisaged, but no further information is available. The measure is allocated for private persons to renovate a detached house, terraced house or semi-detached house, a two-apartment house or terraced house which was officially taken into use before year 2000. It is not linked to social benefits. Another measure, called *Support for element-based reconstruction of an apartment building* was adopted in 2020. The aims of providing the grant are facilitating the adoption of new technical solutions in the reconstruction of apartment buildings, achieving energy efficiency and a better indoor climate for apartment buildings, reducing energy dependency and greenhouse gas emissions. The grant could be obtained in the extent of 50% or up to €1,000,000 per apartment association. It was aimed at apartment associations (managed by cooperatives, i.e., the owners of the apartments form an association with a management), which are located in an apartment building of up to five floors built with a standard (soviet) project before 1993. The third project with a similar purpose is called *Extraordinary apartment building reconstruction grant*. The first grants were allocated in 2015, but in 2020, an extraordinary grant from covid-19 crisis budget was allocated. In addition to the general objectives, the purpose was also to mitigate the effects of the COVID-19 pandemic in the construction sector. The eligibility conditions also slightly changed in 2020. The grant could be applied for fixing up an apartment building

built before 2000 which had an apartment association. The grant is allocated to apartment associations, not private persons, and is not related to receipt of social benefits.

Improving energy efficiency

Croatia's Energy Efficiency Act stipulated the elaboration of National Energy Efficiency Action Plans (NEEAPs) with an aim to create energy saving conditions and address energy consumption needs. The NEEAPs contain long-term goals, energy efficiency measures and indicators for improving energy efficiency. The action plan consisted of 1 planned programme (in process) and standard programmes from 3rd NEEAP (the continuation is planned for the period 2021-2027). A measure currently implemented is "Energy Poverty Reduction Programme until 2026". The programme envisages to combat energy poverty (Majdandžić, Rodik and Eppert, 2021). As mentioned, in December 2021, Croatia adopted a Programme to combat energy poverty, including the use of renewable energy sources in residential buildings in assisted areas and in areas of special state concern for the period by 2025.

The Recovery and Resilience Plan of **Slovakia** focuses on reducing the energy consumption for households via improving the energy efficiency of family houses. The measures are not targeted to low-income households.

Portugal, in its Recovery and Resilience Plan, included the "*Efficiency vouchers*" programme and launched it in April 2021. The plan is to deliver 100,000 efficiency vouchers to vulnerable families by 2025, each worth of €1,300 plus VAT. In this way, they can invest in improving the thermal comfort of their home, either through refurbishment, or replacing or acquisition of energy efficient equipment. The current phase aims to deliver 20,000 vouchers. The following persons are eligible: beneficiaries of the Social Electricity Tariff; those who own and permanently reside in the dwelling for which the efficiency voucher is applied if they have not received the voucher.

Regions in **Belgium** are also announcing more recent further measures in favour of low-income groups. In December 2021, the Flemish Government approved a draft multi-annual plan to combat energy poverty, with a shift of emphasis from remedying to preventative measures (sensitisation and financial aid to households for energy-saving investments). Obligatory renovation measures are being considered too, in the Flemish as well as the Brussels Region.

In October 2021, the **Netherlands** decided in favour of '*Extra money for insulation measures for vulnerable households*' (valid for the year 2022). Households with lower incomes in poorly insulated homes are specifically exposed to high energy prices. The initial 150 million euro available for this purpose was doubled by the government in March 2022⁴³ and, similarly to the initial amount, it was also directed to municipalities, who can start targeted work in neighbourhoods with high levels of energy poverty. Municipalities decide how to do this, also in consultation with housing corporations. This can be done, for example, by issuing vouchers for the purchase of energy-saving products, distributing energy boxes containing, for example, draught strips, radiator foil and LED lights, or providing energy advice by having energy teams visit households. This measure can be seen as a step forward to a more fundamental approach and large-scale insulation (floor, roof and facade) via the national insulation programme. The measure does not directly address affordability, but provides rather assistance in insulating homes – which, through reducing the costs of energy, and high energy dependency, indirectly contributes to affordability, of course. This measure is specifically aimed at the 550,000 households that were defined as living in energy poverty in research of 2021. It is not

⁴³ [More money for households to take energy-saving measures - Eurofound EU PolicyWatch \(europa.eu\)](#)

specifically linked to social benefits or minimum income schemes, although it is likely that most households in the target group would fall under these categories.

Cyprus runs a project *Tackle energy poverty in households with disabled people and support social integration, 2021 – 2026* that will subsidise the implementation of small-scale energy renovations in 300 energy-poor households of people with disabilities. Thermal energy retrofits can significantly alleviate energy poverty and, if combined with small RES installations, can dramatically reduce household energy consumption long-term. Further to the well-established solutions, tailored interventions will be identified. Subsidy can fund up to 80% of the costs. Another scheme with a similar purpose, but for a broader group of vulnerable consumers⁴⁴ and for shorter period was introduced in 2021. It is called *Grant scheme for the replacement of energy-intensive electrical appliances in homes of vulnerable consumers of electricity*, and it lasts from December 2021 to December 2022. The project aims to provide financial incentives in the form of government sponsorship for the implementation of energy saving measures and specifically for the replacement of energy-intensive electrical appliances (specifically, refrigerators, washing machines and up to 3 air conditioners) in homes of *vulnerable consumers* of electricity and to contribute to the achievement of the national renewable energy obligations.

In February 2022, **Luxembourg** introduced a new temporary measure *Acceleration of energy transition*: The government will strengthen financial aid measures for energy renovation, the promotion of heating systems based on renewable energies, sustainable mobility and the installation of renewable energies in order to continue to help households in the energy transition. Details on this measure are to be elaborated.

Greece's 'Energy Saving 2021' is a continuation of the long-term programme, called *Energy Saving at Home* (a project that provided subsidies for energy-saving interventions). The previous programme has been recently extended, while this is a new cycle is financed from the Recovery and Resilience Fund). It is designed for the residential sector, offering financial support for, among others, interventions in buildings, heating/cooling systems, and installation of RES for domestic hot water production and energy-saving measures. The current programme provides a subsidy ranging from 40% to 75% based on income criteria, with a low-interest loan for the remaining investment. The Programme 'Energy Saving at Home II' aims to improve residential buildings' energy performance through the provision of interest-free loans and subsidies for the installation of RES plants and energy-saving measures. The programme is expected to benefit social groups such as people with disabilities, single-parent families, long-term unemployed, large families, households with high energy needs, buildings of lower energy class, older buildings, and low-income households.

Due the energy price increase in **Lithuania**, the electricity market liberalisation process (started in 2021) was temporarily postponed until July 2022 (instead of 31 December 2021) to cushion households from the significant rise in energy prices, and further postponement was debated during

⁴⁴ Vulnerable consumers of electricity are defined in the relevant Decree of the Minister of Energy, Trade and Industry. They are as follows: beneficiaries of the guaranteed minimum income, recipients of Public Aid from the Social Welfare Services, recipients of the Severe Physical Disability Allowance, recipients of the benefit to low-income retirees (if single and 70+), beneficiaries of Care Allowance (if people with severe disabilities, with paralysis are cared for), recipients of the Sponsorship for the Blind, and a large of five-member family receiving Child Allowance.

the summer 2022⁴⁵. The deregulation of electricity prices for household consumers will take place in parallel with the introduction of smart meters that will allow household consumers to monitor and assess their electricity consumption needs more easily and based on this, to choose the electricity supplier best fitting their needs. In accordance with the Law on Electricity, smart metering will be installed free of charge for vulnerable consumers or consumers with disabilities (other groups of consumers will have to cover at least 50% of costs related to the installation of the smart metering system). The legislation foresees those vulnerable consumers are to be disconnected from the public electricity provider in the last phase unless they themselves choose an independent supplier earlier.

Various other incentives/support for green transition

“Tax benefits for electric car charging” in **Denmark** is a part of the political agreement “Green conversion of road transport”, which was introduced in December 2020. The measure extends the scheme with low electricity tax for charging zero- and low-emissions vehicles until 2030. The measure aims to make it more attractive and affordable to people to buy electric cars. The import of electric cars substantially increased when the measure was introduced.

France has introduced the *Ban on renting out homes with high energy consumption* (Interdiction à la location les logements dits ‘passoires énergétiques’). Homes with highest energy consumption, known as “thermal strainer” (*passoire thermique*) will be banned from being rented out from 2023 onwards for an unlimited period. As these dwellings are generally occupied by low-income households, the measure is intended to contribute to fighting energy poverty by obliging property owners to bring their dwellings up to standard or risk losing the right to rent them out.

In **Germany**, a new measure is being discussed, which has some similarity to the aforementioned French policy. According to plans, in the future, property owners will have to cover parts of the heating costs, the percentage depending on how climate-friendly the building is. The tier model means that buildings are to be divided into seven tiers – depending on the amount of CO₂ emissions per square meter per year. In the lowest and therefore most climate-friendly tier with emissions of less than five kilograms of CO₂, the tenants would have to bear the entire cost of heating. At the highest level, which includes poorly renovated and poorly insulated buildings with more than 45 kilograms of CO₂ emissions per square meter, tenants would only have to bear ten percent of the costs.

Croatia adopted the *Energy Poverty Reduction Program Information and Financial Support Measure* for the years 2021–2030, within the framework of *The Long-term Reconstruction Strategy National Buildings Fund until 2050*. The measure was approved in 2020. The goal of the new information and financial measure is to mitigate energy poverty and related vulnerability. Furthermore, the aim is also to establish an energy poverty monitoring system. The activities include capacity building under the Energy Poverty Reduction Program through local info-centres by providing adequate information and advice on energy efficiency measures. This will contribute to the reduction of energy poverty, as well as to the possibilities of co-financing in this field. The measure is mostly an updated form of previous similar measures. The indicators necessary to monitor energy poverty will be identified and a system for their assessment will be established. This will be done primarily through the existing database on

⁴⁵ Within three years, household consumers have to sign contracts with independent electricity suppliers (in the interim, electricity is supplied by the public electricity supplier). The electricity market liberalisation process in the country is to be carried out in three phases. At this point, the Parliament has agreed to postpone the implementation of the second phase until July 2022.

household consumption (collected regularly by the Croatian Bureau of Statistics). Based on the data, a possible extension of the criteria for obtaining the status of vulnerable energy persons will be proposed. The implementation of energy efficiency measures will be directed towards the co-financing poor households in the replacement of household appliances under the "old device for new" system, improvement or replacement of heating systems, especially systems based on electricity and fuel oil. The improved or new heating systems should be more environmentally, economically and energy efficient. The attention will be directed towards heating systems based on renewable energy sources and the implementation of other technical energy efficiency measures. The target groups include primarily energy-poor citizens as well as citizens at risk of energy poverty. The support is not linked to receipt of social benefits.

A temporary measure, introduced on 08/02/2022 in **Finland** (Governmental Decree 77/2022 adopted on 27 January 2022), foresees government funding to compensate for scrapping of peat production machinery. To ensure a just transition to a low-carbon economy as peat is phased out, the government has reserved over €29.1 million for the endowments (The endowments follow EU de minimis-regulations and thus an applicant can receive a maximum of € 200,000 even if they would have scrapped machinery corresponding to a larger total sum).

In **Belgium** (Wallonia), a *Simplified subsidy scheme for small energy-saving investments (< €3000)* was introduced in July 2021. The scheme is means-tested. In **Malta**, in January 2022 a new, fairer billing system that calculates household utility usage was introduced. The new system addresses the anomaly that resulted in some consumers being charged high prices per unit due to the high energy consumption during the peak of summer and winter, when energy consumption is typically at its highest. Given that billing was calculated on a bimonthly basis, these consumers were charged a higher rate although they had not exceeded their allocated annual quota of cheaper units, known as *eco-reduction*. It is a way of awarding a discount to consumers who stay below a specific amount of electricity and water consumption (it is actually a quota of cheaper units, defined for a year).

The issue of (non-) take-up

Many of the measures, aiming to address energy poverty, described in this chapter, extended their coverage recently: sometimes the provision became automatic, or a previously targeted initiative transformed to be universal. This already shows how important the extent of take-up of measures aiming at protecting people from social hardship (especially in times of a sudden and rapid increase of energy prices). The (non-) take-up of any social protection measure has a significant impact on how efficient that measure is, to what extent it can remedy those problems the given initiative is designed to address. In addition, from a broader societal perspective, larger take-up of social protection measures can improve fairness and equity across society (Eurofound, 2015). This is specifically relevant for the topic of this chapter, especially from the point of view of addressing energy poverty.

The non-take-up of a social benefit could be defined as follows: "... a situation in which someone is eligible for, but does not receive, a (social) benefit" (Goedemé et al., 2020). The literature on the concept of take-up of social protection measures points out that coverage and take-up are closely related (as some country examples show – see below). At the same time, the authors also emphasise that this relationship is not that straightforward mainly because coverage can be defined and measured in different ways. In addition, even if the coverage is well-defined, there could be a substantial group of people who, although eligible for a certain type of support, do not take-up the benefit, which aims to ease the disadvantaged situation they are in. The reasons for non-take up could

be diverse. Apart from general reasons often highlighted in the literature (e.g., social-psychological reasons, social-informational reasons, social-cultural, and public administration reasons – see for example: Guogis & Bernotas, 2022), there could be more specific reasons related to access to energy services, as highlighted by the examples below.

In most of the countries, the data on take up are not available. However, there are some interesting examples. Regarding easing access to energy services, some countries recently introduced measures, which are automatically granted to all the customers, for example in **Estonia, Ireland, and Austria**, where, in case of the electricity price decrease, the coverage of the previous measure was extended to all households, not only low-income households upon application. Non-take-up in these cases is obviously less of a risk than in those, where one needs to apply for a given measure, but there could be other problems. In the case of **Austria**, before 2022, persons on lower incomes were eligible for exemptions in paying contributions towards building up green electricity systems (embedded in the price). Although the numbers of beneficiaries remained relatively stable, these figures are significantly lower than the number of eligible persons (estimated at around 300,000). Reasons for not claiming the exemption can be manifold and – according to E-Control’s Consumer Protection Report 2020 (p. 25 most likely include unawareness of the possibility of exemption, the effort involved in applying, as well as the fact that eligible persons are not necessarily always (direct) contractual partners with energy supply companies. In addition, other problems may emerge for example, the (poor) households who do not use electricity cannot be covered.

Take-up has been recognised as an important issue for consideration in **France** since early 2000s, when the Observatory of non-take up rights and services (ODENORE – [Observatoire des non-recours aux droits et services](#)) was set up. ODENORE suggested some reasons for non-take up of measures against energy poverty, such as lack of knowledge and non-application. In its survey of March-July 2020 at regional level, ODENORE found a substantial proportion among people surveyed (78% in case of tax credit and *MaPrimeRénov’*, and 35% about assistance for reducing energy costs), who are unaware of the measures.

Some country examples give interesting insights into reasons for non-take up of certain measures for specific groups. For example, in **Malta**, non-take up is identified especially among asylum seekers and refugees: none of the former, and very few of the latter benefitted from the energy benefit, given their status. But even if the status might allow it, due to the language barrier they tend not to seek the benefits available to them. The issue of take-up/non-take up was examined more generally (for AROPE individuals) by the Foundation for Social Welfare Services (FSWS). It stated that a general lack of awareness is a predominant barrier, while stigma is another. Those who have accumulated utility arrears may feel overwhelmed and/or disempowered to access energy benefits. Mental health difficulties and intellectual difficulties are other aspects that hinder access to existing benefits. These challenges at times limit service users from understanding what is available to them or may make accessing the benefits harder and thus disempowering. Another important aspect was highlighted in **Lithuania** by the example of socially disadvantaged persons who are not the owners of the premises they live in: in that case, they are unable to apply for support for installing modern equipment. Another obstacle for socially disadvantaged persons (also in Lithuania) concerns the high costs of the equipment: reportedly, if the compensation payment does not cover its the full price, paying the difference in the price of the equipment to be purchased is still not affordable.

In sum, take-up of social benefits (including those aiming at compensating for the high costs of energy) plays a key role in how effective welfare services/benefits could be. In principle, extending coverage, and especially universal services could improve the take-up rate or even eliminate non-take up; the advantage of universal services is that no administrative costs are involved for examining the eligibility

criteria. An important prerequisite for improving the situation in general is to collect more data on take-up of services, since in this way, the decision-makers could get a clearer picture of how to improve the effectiveness of the measure.

Potential impacts of the measures on supported groups: Current evidence and past lessons

Impact of some previous measures

Even if no evaluations of the new national measures have been made so far, some impacts and lessons can be outlined.

In **Ireland**, within the context of the carbon tax strategy adopted, there has been some research on its projected impact on energy prices and on energy poverty. The Economic and Social Research Institute (O'Malley et al. 2020) conducted a detailed counterfactual analysis, i.e., what would have happened if various targeting measures to assist low-income households (mostly increases in various benefits) were not adopted. Without assistance, the ESRI projected that energy poverty (a person spending more than 10% of their income on energy after-housing costs) would increase from 17.5% to 18.9%. Severe energy poverty (energy expenditure over 15%) would increase from 5.6 % to 6.1% and extreme energy poverty (more than 20%) would increase from 3.0% to 3.3%. This was based solely on the increase in carbon tax by additional €7.50 per tonne. Another recent study (Tovar Reaños 2021), based on projecting the impact of the carbon tax increases on energy poverty, estimated a 1% increase in fuel prices for residential heating due to carbon taxation would raise the proportion of people experiencing energy poverty from 11.5% to 12%. As a nearly 30% increase is seen at present, it would follow that a significant increase in the rate of energy poverty is likely. Of interest, both these studies identified low-income single parents as particularly at risk.

In **France**, the energy voucher was introduced in 2018 (by replacing the previous social tariffs) with a view of targeting households in energy poverty better than previously, this time extending the measure by supporting them irrespective of the energy they use. However, now the scheme is criticised because of the fact that the cheque can finance any type of energy (carbon and decarbonised) goes against France's climate objectives⁴⁶. Also in **France**, longer term implications of some of the schemes have yet to be seen. For example, in the case of "*Ban on renting out homes with high energy consumption*", the measure may have short-term implications for rent prices, i.e., this could lead to a shortage of flats to be rented which may drive up the rents.

In some cases, hardly any impact of tax reductions seemed to have been made, or it was just negligible. From studies⁴⁷ in **Germany**, it seems that the reduction of the EEG levy (Erneuerbare -Energien-Gesetz, EEG, i.e. Renewable Energy Act) did not have a major effect if at all: for 1.6 million households covered by 192 basic suppliers, there was an increase in electricity price, and even for those households (1.2

⁴⁶ In terms of extending the energy use as an eligibility condition for support, a similar measure was introduced in Hungary also in 2018, even if that was a one-off measure, called "winter utility bill reduction scheme" (HUF 12,000 i.e. about €33 per household), where this time not only those who used mains gas and district heating, but also those who used wood, coal and bottle gas).

⁴⁷ They are quoted in tagesschau.de (2022) : [Laut Vergleichsportalen: Senkung der EEG-Umlage kommt nicht an | tagesschau.de](#)

million), covered by 21 basic suppliers which did reduce the price, the benefit was marginal: €37 a year for an average (model) household.

Challenges related to implementation of measures: lessons learned

Even if many countries introduce the measures meant to limit the costs of energy services on a temporary basis, sustainability of certain schemes (especially the longer-term ones) could be a concern. For example, in **Hungary**, there is a debate about sustainability of the Utility cost reduction programme, which is in place for almost 10 years⁴⁸. Although similar concerns were raised in **Poland** because of the total cost of the two anti-inflation shields, now it seems the budgetary situation has improved. At the same time, according to a survey⁴⁹, people tend to be willing to save energy in their households voluntarily, as well as more willing to install energy-saving equipment and retrofit their households - all especially within the context of attempts to become less dependent on energy import from Russia. If the energy prices do not increase any further, this attitude could relieve the burden on the budget, since the anti-inflation shields could be reduced.

In **Austria**, experts found that in the Austrian National Energy and Climate Change (NECP) plan, vulnerabilities in different socio-economic groups (e.g., according to age, gender, state of health, etc.) are not addressed (Lamura, Soder, Matzinger, 2022). Beyond income, structural inequalities, which are closely intertwined with energy poverty, would also remain addressed only to a limited extent. The Chamber of Labour (Arbeiterkammer) recommendations⁵⁰ include both short-term and medium-term solutions (as of in December 2021). Regarding the short-time (immediate) solutions, it suggests not switching energy off during the cold season; a right to payment in instalments; an increase in heating costs subsidies; and a temporary reduction in sales tax. With regard to medium term solutions, the suggested measures include the establishment of an energy and climate aid fund; securing increases in the heating subsidies provided by the federal states; a one-stop shop for heating replacements and renovations; reducing tax burden on renewable energy sources; improved consumer rights in the heating supply; consumer friendly standard tariffs; and a longer-term surveillance of the energy markets.

In **Estonia**, the National Recovery and Resilience Plan describes the main risks and obstacles implementing the renovation support measures. These include: apartment owners lack motivation or it is very difficult to establish a common agreement between the owners for the complete reconstruction; reconstruction prices fluctuate significantly and do not favour the start of energy efficiency work; growing demand in the reconstruction market is raising reconstruction prices and due to long waiting times, complete reconstruction is being abandoned; the availability of builders, experts and technical consultants can be problematic as reconstruction volumes increase; the availability of certain types of construction materials in the construction sector may also decrease due to longer delivery times. In case of private houses, the main obstacle for using renovation measure is too high renovation costs, even together with the support. A similar experience is noted in **Ireland**, where it was also reported that not only have the energy prices increased, but (perhaps to some extent related to that) also the construction prices did. As a consequence, retrofitting of houses/flats became increasingly difficult: generally, the purchasing power of households for that decreased. For example, according to the Central Statistical Office (CSO), in January 2022 the 12-month increase figure for "Electricity, gas & other fuels" stood at 27.4%. Also of some concern is the increase of 'maintenance

⁴⁸ Extra taxes on multinational companies, banks and airlines have recently been announced - the move has been explicitly justified by the need to keep up the Utility price reduction programme.

⁴⁹ Please see: <https://www.warsawvoice.pl/WVpage/pages/article.php/53928/news>

⁵⁰ [Steigende Energiepreise | Arbeiterkammer](#) (accessed: 17/08/2022)

and repair of the dwelling' which had increased by 6.7%. In **Malta**, affordability problems for installing solar panels (e.g., for the AROPE-group) were also reported. Similarly, other existing schemes present affordability issues due to too high upfront costs, which consequently deter vulnerable individuals from making use of them. As already indicated above, the government has decided to continue with its green energy alternatives. However, both the initial costs and factors such as property ownership (mentioned within the context of non-take up also in Lithuania, above) make it very unlikely that the AROPE population would find such schemes affordable.

In **Lithuania**, according to experts, the main barrier of reducing energy poverty is not low income alone, but rather "poorly insulated inefficient multi-apartment building stock inherited from Soviet past and low rates of mass renovation"⁵¹. Streimikiene (2022) also suggests that slow progress in renovation of multi-apartment buildings is related to institutional, organisational and behaviour barriers ("low-income population is lacking knowledge and know-how for initiation of energy renovation in their apartments"). There is also a lack of consensus among the owners of multi-apartment buildings on the renovation of the buildings (ibid., p. 221). On the basis of their survey of 104 households, Štreimikienė, Baležentis (2020⁵²) identified the following reasons of the lack of households' willingness to renovate their homes: low financial education, low energy literacy, lack of information, low motivation to initiate energy efficiency projects themselves, insufficient co-financing for the renovation of multi-apartment buildings. The authors also identified the main barriers to renovation: organisational barriers (absence of household's association in multi-flat building; reaching common agreement on renovation between apartment owners; absence of leaders assuming organisational responsibilities of renovation), economic barriers (low income of the households and reluctance to take out loans), public policy barriers (inadequate state support, the support schemes are not well shaped), behaviour and psychological barriers. The study showed that over 90% of households would choose to pay for energy renovation by having renovation costs included in their monthly heating bills. (Liobikienė & Dagiliūtė, 2021⁵³) found (based on a survey of 1,005 respondents) that the main barrier to choosing and consuming renewable energy is usually a higher price level. According to the authors, this situation reveals the problem of motivating people to choose more expensive renewable energy.

Although, as mentioned, the focus of this chapter is on experiences of individual countries, it is worth noting that there are also cross-country project-based measures that are running in a number of Member States and target the low-income groups (sometimes more directly than other national policy measures). Examples include an international project "POVERTY-Renewable energy for vulnerable groups" (2019-2023), financed by INTERREG EUROPE 2014-2020, with a budget of €1 million, the goal is to share good practices. The project aims at increasing the use of renewable energy among vulnerable groups. The participating countries are: Lithuania, Spain, France, Bulgaria, and Poland (EPAH ATLASa⁵⁴). Another similar international project is called "ComAct – Community Tailored Actions for Energy Poverty Mitigation" (2020-2023), with the budget of €1 million. The aim of the project is to make high-impact and high-cost energy-efficient improvements in multi-apartment buildings in the Central Eastern European and regions of the former Soviet Union countries affordable

⁵¹ Streimikiene, D. (2022). COVID-19 impacts on Energy Poverty: Lithuanian case study. *Montenegrin Journal of Economics*, 17(4), 215-223. (p. 221)

⁵² Streimikiene, D., & Baležentis, T. (2020). Willingness to Pay for Renovation of Multi-Flat Buildings and to Share the Costs of Renovation. *Energies* (19961073), 13(11), 2721. <https://doi.org/10.3390/en13112721>

⁵³ Liobikienė, G., & Dagiliūtė, R. (2021). Do positive aspects of renewable energy contribute to the willingness to pay more for green energy? *Energy*, 231, 120817. doi:10.1016/j.energy.2021.1208.

⁵⁴ EPAH ATLASa. POWERTY - Renewable energy for vulnerable groups (online interactive database). Available at <https://atlas.energy-poverty.eu/node/857>

and manageable for energy-poor communities as well as to create the necessary assistance conditions for lifting them out of energy poverty (ComAct⁵⁵, EPAH ATLAS⁵⁶). Another example is the “STEP – Solutions to Tackle Energy Poverty” (2019-2021), funded by the EU Horizon 2020 (participants: Bulgaria, Cyprus, the Czech Republic, Latvia, Lithuania, Poland, Portugal, Slovakia, and the United Kingdom)⁵⁷. The project aims at alleviating energy poverty by promoting changes in consumer behaviour, informing consumers affected by energy poverty about the opportunities to save energy costs, and sharing good practices of other countries.

Also, there has been an increasing interest by researchers and policy makers in exploring local level and community-oriented initiatives – to mobilise social innovation addressing groups under energy poverty (for example, by supporting energy self-production and offering sustainable and cheap energy for vulnerable and deprived communities.⁵⁸

This interest is also being reinforced by concerns about regions that are likely to be affected during the green transition, for instance in terms of initial job loss.⁵⁹

In the background of long-term goals of switching towards the environment-friendly use of energy types, some questions for policy design relate to the effectiveness (for the green transition purposes) of taxing the energy use and the regressive effect of universal measures in area of energy as well as transport services. Buchs et al. (2021) have carried out an analysis of household expenditure for energy and transport in combination with data on carbon emissions – in search for optimal policies to bring the society along towards greener life- styles. They concluded that taxes on home energy aiming to reduce carbon emissions should be combined with compensation schemes that balance out the regressive distributional impact of those taxes. Taxes on transport were found to also have regressive effects but less so than for home energy in many Member States, yet compensation schemes were also considered relevant in such cases. The authors estimated the compensatory measures (tax rebates) in comparison with an alternative of in-kind support, or a certain amount of free-to-user services such as green voucher schemes for energy or public transport without imposing any tax first. The latter option was found to have a potential for greater emission reductions, fairer cost distribution and lower poverty compared to carbon-tax policy options (European Commission 2022d).

Finally, citizens’ involvement in the transition process is crucial, yet it may have been overshadowed by the need for a prompt policy making in the area of energy costs recently. The concept of “energy citizenship” by Debordou et al. (2022) elaborates on steps which could promote citizens’ involvement. Similarly, citizens’ involvement is the main focus of a project entitled “The Fair Energy Transition for All”, co-ordinated by Belgium’s King Baudouin Foundation. It has surveyed disadvantaged groups across the continent and documented a sense of unfairness, mistrust of political institutions and fears of losing agency. Therefore, *the measures for improving access to low-income groups should be seen and assessed in a wider social policy context*. This matters both at a national and EU-level: in the Member States, synergies with other measures are important, such as facilitating access to essential

⁵⁵ ComAct (Official site). Available at <https://comact-project.eu/the-project/>, <https://comact-project.eu/lithuania/>

⁵⁶ EPAH ATLAS (online interactive database). Available at https://energy-poverty.ec.europa.eu/discover/epah-atlas_en

⁵⁷ STEP – Solutions to Tackle Energy Poverty (Official website). Available at <https://www.stepenergy.eu/>

⁵⁸ See: Mikkonen et al. (2020) *Social innovations for the energy transition*; Caramizaru, Uihlein (2020), *Energy communities: an overview of energy and social innovation*.

⁵⁹ For example, see the set of challenges for the coal-producing regions at: <https://ec.europa.eu/jrc/en/science-update/energy-poverty-and-reskilling-european-coal-regions>

household services, and interlinkages between the central government and regional as well as local authorities.

Key findings and policy pointers

Key findings

The information presented showed that all the Member States reacted to the increase in energy prices. The measures applied, however, were diverse across the countries and ranged from direct measures to support access to energy services (such as reduced tariffs, cash benefits, in-kind benefits and extension or introduction of securing basic/uninterrupted supply of energy) to those that aimed to accelerate green transition by supporting household retrofitting, energy efficiency improvement and other actions.

Most Member States have specific measures (such as cash benefits in 21 countries) to provide targeted support. Especially the reduced tariffs and cash benefits are most widely applied. This is understandable since in such emergency situations direct policy interventions are quicker and easier to implement than building up or enhancing the preconditions for other measures, such as retrofitting of houses, building/expanding energy efficient social housing stock, etc.

However, it is notable that most of the recent emergency measures in area of energy services are not targeted, but apply universally, to the entire population (this is different compared to structural measures that are usually targeted). Reduction of various taxes, duties and levies were tools for addressing the rising energy prices and were used across the Member States - several countries reduced VAT for energy to consumers and applied reductions to some other taxes. Within this context, it can be noted that in several countries there were cuts in contributions, which aimed at facilitating the green transition (Austria, Germany, Luxembourg, Slovenia). It is clear, however, that the intention is not to slow down the process (so this reduction does not mean that measures facilitating green transition would have been reduced). They are either temporary, and/or the state compensates directly by increasing its part of contribution (for example in Luxembourg), or, in the case of Germany, the finance will come from a special fund dedicated to the extension of the renewable energy supply (Energy and Climate Fund – EKF) from 2023.

The tax regulation measures apply to all consumers in most cases. There are exceptions though: for example, in Cyprus, where the VAT-reduction applies to vulnerable groups only (they are defined and various categories are identified - see details in the paper); in the Netherlands, where the measure is universal, but the discounted amount depends on the energy consumption of the household.

Freezing prices, applying price caps or moratoria are also widely used in relation to energy prices, but very often as temporary measures. In some countries, the price regulation measures were applied for fuel costs for cars (for example in Hungary, Poland in 2022), though these types of measures are usually not targeted⁶⁰, with some exceptions such as Greece, where a direct fuel subsidy was temporarily applied in 2022 to low-income households.

⁶⁰ In Hungary, although not targeted to low-income groups, the measure was amended in the summer 2022 so that the price cap does not apply for example for company cars any more (whereas they do apply for taxis, certain motor vehicles in agriculture and private cars).

Several Member States (Belgium, Portugal, Spain) do have established social tariffs (discounted prices) for energy services to households that are relevant to vulnerable costumers and people on low incomes.

In some countries, not only are the new measures automatically provided, but the coverage of the previously introduced measures is extended in such a way that their provision has become automatic: this has been mainstreamed for the social tariffs in Belgium; in Austria, the exemption of the green tax and contribution was extended to all households. In terms of take-up, these measures could be regarded as good practices, but it remains to be seen whether they will be maintained.

In terms of easing access to vital energy services for low-income groups, guaranteeing basic/uninterrupted supply is of special importance (it has been stipulated in the EU-legislation: the provisions of the Electricity Directive (EU) 2019/944 contain this requirement). In this regard, few changes can be observed since 2020. The measure continues to be applied mainly on a seasonal basis in those countries where it has already existed (such as France, even if a reduction in certain fees in case of payment incident applies). Recently two more countries had temporarily introduced this measure: Portugal and Romania.

The measures adopted by the Member States in 2020-2021 to address rising energy prices and the risk of energy poverty do not seem to have been sufficient: further measures, including revision or extension of reduced ('social') tariffs, were being reported or considered in many countries throughout 2022.

The real impact of these measures may depend on for how long the reduction will apply, whether any conditions are set for eligibility or types of consumption (applicable for all consumption or for certain essential needs only), as well as on the impact these measures could have on inflation, which could affect the most vulnerable groups primarily. Assessing these aspects may create room for countries to adjust and target their tax measures (if the related administrative costs are acceptable) as well as tackling the tax revenue, and in this way, to address concerns about the sustainability of supporting energy consumers long-term. In view of the evolving energy crisis, the policy pointers below consider both the current situation and aim to foresee potential future challenges for vulnerable consumers, such as a risk of accumulating utility arrears and thus falling into indebtedness.

The new measures facilitating the green transition will obviously have long-term effects, the extent of which may depend on the budget allocated for these measures. From this overview, it seems that currently about one third of the Member States have such schemes targeted directly to vulnerable groups or plan to do so in the immediate future. In case of more indirect measures (for example, grants for renovation of old buildings, where the main criteria are the obsolescence/inefficiency of the energy system), it remains to be seen to what extent these measures could reach the most vulnerable groups – their accessibility for and take-up by the low-income groups is not always readily assessed.

Policy pointers

As a reaction to the energy price increase during the last couple of years, a large number of universal (rather than targeted) financial measures emerged across the Member States aiming to reduce the energy cost to end-users. However, the longer-term effects on access to energy services will depend not only on the developments in the energy markets and the impact of the war in Ukraine, but also on the extent these measures are able to reach the people most in need. Therefore, it remains

imperative to **keep monitoring the affordability of energy services particularly to low-income groups**⁶¹.

The fast-evolving challenges to energy supplies and the volatility of energy prices in the first half of 2022 suggest that risks of utility arrears and indebtedness may also increase. A particular attention should be paid to preventing over-indebtedness, especially among the low-income households (see more: Eurofound (2020) 'Addressing household over-indebtedness'). Therefore, **debt counselling and preventive supporting services should be prepared to help**, and their readiness could be reassessed before the heating season.

Apart from the immediate mitigation of energy costs for vulnerable households, more focus is needed on reducing their overall energy dependence – facilitating means that help decrease energy consumption and waste, such as through improved energy efficiency of buildings. Equitable access to renewable energy sources by all social groups, including those on low incomes, also has to stay on the radar of the energy transition measures.

In terms of policy measures addressing access to energy services, **the focus should not be solely on financial measures, but also non-financial ones like an automatic ban on disconnections and addressing arrears/debts, as well as securing transparent and accessible information and advice. To guarantee continuous supply for vulnerable consumers, ban on disconnections for them should be automatically provided on the grounds of vulnerability** – for this, building up, maintenance and updating of administrative databases have to be addressed. The measures to secure basic supply of energy are of specific importance due to the direct impact the adequate use of energy services has on health. Where the affordability is a challenge, an outreach to low-income groups is needed to prevent the situations that raise risk to accessing energy services; complicated procedures for applications should be avoided.

Non-financial measures could include facilitating energy transition also for low-income groups by accelerating and facilitating energy efficiency of buildings and deployment of renewable energy resources also for this group of people.

If the measures are based on solid evidence, they can be more sustainable and successful. This is one of the reasons for why **a clear definition on energy poverty is needed both at EU and national level** – this should be operationalised so that hard data could be provided. They are necessary for well-targeted measures as well as for the impact tracking.

In addition, disaggregated data on energy poverty are needed: as could be seen in the overview of the measures, municipalities have a key role in addressing energy poverty – this can be crucial also for them to target the support and incentives properly.

Citizens' involvement in the transition process is crucial, yet it may have been overshadowed by the need for a prompt policy making in the area of energy costs recently.

The rapid increase in energy prices exposed the need for a more elaborated public regulation of the energy sector – this could have a longer-term impact on the way how energy markets and energy

⁶¹ An IMF-blog article of 03/08/2022 '[How Europe Can Protect the Poor from Surging Energy Prices – IMF Blog](#)' (accessed: 05.09.2022) called for a shift of policies from broad-based measures to targeted ones, including income support to for the most vulnerable groups.

service provision work and through this, access for vulnerable groups can become more secure and more reliable long-term.

Public transport

This chapter focuses on access to transport services, which are available to the public via set routes, specified time-schedules and on the basis of defined fares; such transport services are commonly known as ‘public transport’. ‘Public’ refers to transport being accessible for everybody; its services may be delivered by public, or private providers. While the precise definition can be discussed, for the purposes of this report it generally refers to urban and suburban services of bus/trolleybus, tram, train, and metro (but could also concern ferry); often transport services of trains and sometimes buses tend to be for longer distances, while other transport is more local. Car, plane, taxi, and car sharing service use are not included into the coverage in this review – they are considered here as transport used in private capacity, without the regularity and collective use that are generally common to public transport.

Public transport is used more by people with low incomes than by people with high incomes, hence the decision to focus on public transport in this overview of access to essential services for people on low incomes. Women are also over-represented among public transport users (European Parliament, 2015; Ingvardson and Nielsen, 2019). Access to public transport is particularly important for the many people in the EU who do not own or cannot use a car, such as groups of persons with disabilities, older people, children and young people, women, and people with low incomes (European Parliament, 2015). Also, sensitivity to financial incentives to switch from car to using public transport tends to be larger among these groups (Simićević et al, 2016).

The overview focuses mostly on schemes that reduce cost for the end users, and on the support for low-income groups and groups which may (or may not) otherwise be in vulnerable situations, including persons with disabilities, carers, unemployed people, retirees, children, and students. It includes national and sub-national schemes. It is based on input from the Network of Eurofound Correspondents, and desk research by Eurofound. The chapter also draws on literature, some national administrative data, and other documentation, including evaluations of measures.

EU policy context in brief

Assessments of the distributional impacts of climate policies in Europe warn against potentially disproportional impact on the less-resourced groups unless the measures are balanced out to smoothen the green transition (Eurofound, 2021). Against this background, there is an interest in monitoring access to transport services for the groups with low incomes. A recent Council Recommendation on ensuring a fair transition towards climate neutrality (16/06/2022) invites Member States to ‘develop further research and strengthen evidence concerning the definition, monitoring and evaluation of progress towards the provision of adequate access to essential services, in close cooperation with Member States and taking into account national approaches, also by developing the concept of “transport poverty” if appropriate, in particular within the context of the green transition towards a sustainable well-being economy’.

In 2021, the European Commission issued a second package of proposals to support a transition to cleaner, greener transport following the publication of the Commission’s Sustainable and Smart Mobility Strategy in December 2020. It includes measures for faster European rail connections with easy-to-find tickets, as well as support for cities to increase and improve public transport and

infrastructure for walking and cycling.⁶² The latter, the updated EU urban mobility policy, puts a big emphasis on safe, inclusive and affordable public transport and states that it *'must be at the centre of sustainable urban mobility planning, be available and attractive to all and offer barrier-free access'*. Public transport is further eligible for funding from the public sector loan facility under the Just Transition Mechanism. This mechanism should enable the communities in the most affected regions to reduce the socio-economic costs of the transition towards a climate-neutral Europe by 2050.

Furthermore, the United Nations' Sustainable Development Goals, to which the EU subscribed, include a public transport related target under its goal to 'make cities and human settlements inclusive, safe, resilient and sustainable'. It aims, by 2030, to 'provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons'.⁶³

Reducing user costs for groups in vulnerable situations: potential benefits

In this chapter, the focus is on measures aimed at reducing public transport costs for groups in vulnerable situations, who specifically are often at higher risk of being unable to afford public transport. However, unaffordability of public transport can be addressed by more than cost reductions alone (Eurofound, 2020a). For instance, general income support (such as via minimum income schemes) can enable public transport use.

Since low-income groups are more likely to use public transport, also measures which are not targeted to low-income groups (or other groups in vulnerable situations) to reduce the cost of public transport tend to benefit low-income groups more than high income groups. However, such measures fail to reach people in need who are left without access to adequate public transport. These often concern people living in rural areas, but also groups of people in urban areas (e.g., NSMOT, 2020). For them, existing public transport networks do not meet their needs due to various access problems. Stops may be too far or difficult/unsafe to reach, timetables may not suit, connections may be inadequate, travel time may be too long, people may not feel safe while using public transport (including due to gender-based violence), or public transport may not be well adjusted for people travelling with buggies, walkers, or persons with physical or intellectual disabilities, including wheelchair users. Public transport networks have often faced reductions over the past decades, including cuts in rail transport networks. For instance, in Poland, since 1989, 3,733 km of railway routes were liquidated, while 196 km have been restored (Trammer, 2019).

Public transport has been identified as one of the most important services to enable people's every day live, after healthcare (EIGE, 2020). It plays a somewhat more important role for women than for men: about two-fifths of women in the EU and UK together said that public transport had been 'very important' in enabling them to participate in education (40%) and employment (42%), compared to around one-third of men (32% for education, 33% for employment). Women on low incomes most often saw such services (along with for instance good footpaths and pavements, and streetlights) as enabler for education, employment, domestic and care work, social relations and taking care of their

⁶² New EU Urban Mobility Framework, COM(2021)811

⁶³ <https://www.globalgoals.org/goals/11-sustainable-cities-and-communities/>

own physical and mental health. Inability to access transport services and lack of own transport are linked not only to unemployment, but also to limited access to social and educational services for children, social exclusion, and lack of access to healthcare (NSMOT, 2020; 2021).

Public transport is an important source of accessibility to jobs, in particular for people on the edge of the labour market, many of whom do not have access to other forms of transport (Johnson et al, 2017). Also, work pays off less if much of salary is spent on work-home commute. Bad access to transport can add to challenges in reaching work, with negative implications for quality of life (NSMOT, 2020; 2021). In an Irish study, 45% of households without a car said lack of transport was a significant barrier to finding a suitable job or changing jobs, compared with 22% of one car households and 18% of multi-car households. Most car-owning respondents found that a car was a necessity to get about. Among households without a car, 30% reported that they did not need a car as they can get around satisfactorily without one; while 70% said a car was necessary to get about where they live (Rock et al, 2016).

Public transport can contribute to reducing financial stress when it contributes to reduced car ownership or use. In the Irish study mentioned above, about half of low-income multi-car households particularly reported car ownership as a large financial burden (Rock et al, 2016). Car loans, often with high interest rates especially for lower income groups, are also among the contributors of over-indebtedness, with all its adverse consequences (Eurofound, 2020b). Another study identified geographical areas where people are at particular risk of forced car ownership due to lack of access to public transport and low-income levels. Forced car ownership implies that people find themselves in need of a car to get where they need to be, while often experiencing economic stress due to owning a car (regarding costs of owning a car in the EU, see [Gössling et al. 2022](#)). Investment in public transport reduced such forced car ownership (Carroll et al, 2021).

Transport needs are not a given. They depend on the need to travel to work, school, childcare providers, shops, healthcare providers, friends and family, as well as leisure activities such as sports. Some of these needs can be reduced by making sure services can be reached by foot or electronically. It is important to note that transport is not an objective as such, but rather a means to get where one needs to be. Issues with transport services can thus be addressed both by making transport more accessible, and by reducing dependence on transport to access services, work, and leisure activities. Digitalisation (facilitating teleworking, e-healthcare, e-government services), and improving access to services near people's homes can play an important role (Eurofound, 2018; 2020a). Improving access to affordable housing of adequate quality nearby work and services can also be part of the answer (Eurofound, forthcoming). Another important factor is sustainable urban mobility planning to reduce the need to travel long distances and promote public transport and active mobility as the most sustainable and inclusive mobility options (Dubois, 2022b).

Facilitating public transport rather than car usage is in line with the European Green Deal's aims to address climate change and environmental degradation, and the EU urban mobility policy. This is generally the case when people shift from private (car) to public transport use, which tends to be more energy efficient. For instance, tariff reduction in public transport in areas in Portugal (discussed below) has led to a decrease in road traffic in 2019 (-4.1% in the Lisbon Metropolitan Area and -3.5% in the Porto Metropolitan Area) and reduced carbon dioxide emissions at 154 thousand tons (Botelho, 2020). By both being progressive and being in line with the European Green Deal's aims, development of public transport could also be assisted (in the most affected regions) via the EU's Just Transition Mechanism. This mechanism aims to ensure that the transition towards a climate-neutral economy happens in a fair way, leaving no one behind. However, better access to transport services can also ensure people can get to places where they would not have gone otherwise. This may imply some

energy consumption that would not be in line with the European Green Deal to become the first climate neutral continent by 2050, but it can contribute to quality of life and better access to services in harmony with the European Pillar of Social Rights.

Public transport use is also good for the population health - via helping to reduce air pollution and by implying more physical activity compared to the use of cars. This is particularly the case for public transport modes that are electric and thus do not release harmful exhausts. The lower socio-economic groups tend to be more exposed to air pollution (EEA, 2020). There is thus more to gain by the lower socio-economic groups from reducing air pollution, in terms of health. Older people, children and those with pre-existing health conditions are also more susceptible. Thus, reducing air pollution likely benefits them to a greater extent. Public transport also has the potential to improve health as it involves more physical activity than car use. (Van Soest et al, 2020). It is linked with more usage of active mobility (walking and cycling). Both initiating and increasing public transport use were associated with increased physical activity and reduced Body Mass Index (Lavetry et al, 2018). It thus can contribute to addressing the surge in overweight, currently most pronounced among older people with lower incomes (Eurofound, 2022a). Moreover, public transport is also a relatively safe mode of transport, with fewer casualties due to collisions compared to car usage (González-Sánchez et al, 2018). So, public transport contributes in three ways to reducing health problems, disabilities and deaths by stimulating improved air quality, physical activity and traffic safety. Due to this positive impact on health, public transport can have positive economic impacts, increasing life expectancy, reducing medical costs, increasing productivity, and enabling employment and education; it can also contribute to reducing traffic jams. However, especially in urban contexts where walking and cycling infrastructure is well-developed, there is a risk that people shift from these cleaner and healthier modes of transport to public transport if the balance of attractiveness shifts toward the latter.

Naturally, there are public expenses involved, which can come at cost of addressing other needs. The reduced and free fare public transport discussed below lead to increases in public expenditure. Even without expansion of the reduced-cost or free-fare entitlements, there are long run upward pressures, such as in an ageing society more and more people reaching the age at which they qualify for discounted/free travel. Also, crises can push expenses upwards, such as when people's income is not in line with the threshold for discounted/free travel or when many become unemployed. During the pandemic, there have been specific restrictions to access to public transport. Furthermore, 67% of Europeans said they were less likely to use public transport because they are worried about their health due to the COVID-19 pandemic.⁶⁴ This led to sharp decline in income from ticket sales, often partly compensated by the public purse. For instance, in Bulgaria, in December 2021, bus carriers were supported with BGN 40 million (close to €20.5 million). However, given that better access to public transport can contribute in particular to increased employment, reduced healthcare needs, expenditure on improving access should be seen as an investment, with both financial costs and benefits.

⁶⁴ <https://www.eib.org/en/infographics/67-percent-eu-avoiding-public-transport-health-concerns>

Reducing user costs: evidence from the Member States

Targeting specific groups

People on low income

ESPN (2020) noted that support measures to facilitate access to public transport for people on low incomes only seldom target people on low incomes specifically. The current study confirms that finding yet has identified some further exceptions where income is a criterion.

Measures to reduce user costs for public transport are sometimes purely income based. For instance, in Utrecht (Netherlands), families earning up to 125% of the social welfare can request a card on which €120/year is loaded. The part that can be used for public transport was increased from €30 to €75 in 2020. In Vienna (Austria), persons receiving minimum income/social assistance or minimum pensions are entitled to subsidised public transport through the 'Mobile pass' scheme.

Sometimes support for public transport is included in a broader cash benefit for low-income groups. For instance, estimated public transport expenditure is part of the basket on which the benefit calculation is based. In Germany, over 2.7 million households received minimum income benefits in November 2021. Part (€41.13 for a single-person household) of this minimum income (€449 for a single-person household) is based on a calculation of typical transport costs (January 2022 figures).

However, more often, support for low-income households is not for all low-income households, but in combination with specific social-economic criteria (e.g., referring to a vulnerable situation beyond income). They include persons with disabilities, carers, children, unemployed or pensioners with low incomes. For instance:

- In Zagreb (Croatia), free public transport is available to: 1) pensioners or persons over 65 whose total income is less than HRK 3,200/month (€432), 2) persons with disabilities in receipt of guaranteed minimum benefit and those unable to work and earn, 3) full-time school or university students from a household whose total monthly income per member is less than HRK 2,000 (€270), 4) people granted asylum and foreigners under subsidiary protection residing in the City of Zagreb, 5) unemployed persons whose total monthly income per household member is less than HRK 2,000 (€270).
- Šiauliai City Municipality (Lithuania) since 2018 provides free city bus transport to children from disadvantaged or low-income families attending day-care centres.
- In Amsterdam and Weesp (Netherlands), since 2018, informal caregivers (between 18 and state pension age) earning up to about 125% of social welfare (and having few assets) who travel more than 3 kilometres to their care address receive a monthly €20 public transport credit.
- In Poland, travel cost to work/training can be reimbursed by public authorities for maximum 1 year to someone who has been referred by the labour office, and has taken up work /training, with income up to 200% of the minimum.
- In Slovakia, the public transportation company in Prešov offers reduced fare for Prešov town or Ľubotice village citizens: a) aged 65 and older whose monthly retirement pension is up to €300 a month (and is their only income), or b) with disabilities with an income of up to €300 a month.

There are several Member States where public transport support is not specific for low-income groups; discounted fares may be available for certain categories, and public transport subsidised more generally, but discounts do not depend on people's income as such (such as in Denmark).

Persons with disabilities and carers

Reduced fee or free public transport to persons with disabilities is commonly offered in many countries and localities. For instance:

Some countries provide travel for free or at reduced fees for **persons with disabilities**. Germany, since 2016, provides persons with disabilities with free public transport (depending on the grade of the disability and only with a German disability certificate); Ireland does so as well. In Malta, from 2021, persons with disabilities are entitled to free public transport. In Slovakia, persons with disabilities travel for free by trains. In Croatia, subgroups of persons with disabilities, and military and civilian war-disabled persons, are entitled to reduced fees for rail and coastal public transport. In Greece, persons with disabilities have the right to free travel by public transport of Athens (OASA) and Thessaloniki (OASTh), and (for people with more severe disabilities) 50% discount for sea travel applies.

Municipalities also offer public transport at reduced costs to persons with disabilities. For instance, in Riga (Latvia), persons with disabilities are entitled to free travel. In Slovakia, in Žilina persons with disabilities are entitled to free local public transport, and in Prešov persons with disabilities on a wheelchair and blind people are.

Often **carers** are entitled to the same discount or fee waiver. For instance, in Germany, persons accompanying (assisting) passengers with disabilities may be taken along free of charge if the authorisation to take an accompanying person is documented in their disability pass. In Ireland, carers are entitled to free travel. In Zagreb (Croatia), persons with parent-caregiver or caregiver status, are entitled to free city public transport. In Lithuania, since 2022 families with children with disabilities receive 20% discount on use of train (LTG Link) services, as part of a 'family card' scheme. In Denmark, people with limited mobility or a mental illness can seek a companion card for public transport, entitling both the companion and the person with disabilities to travel at reduced fees (equal to that for children). In Hungary, students at a special education institute with two escorts and residents of a care facility (either live-in or day care) with one visitor and up to two escorts receive 90% discount; disability benefit recipients receive 16 return journeys a year at 50% discount and 2 return journeys at a discount of 90%. In Austria, while (besides war victims) persons with disabilities pay 50% of the ticket price, carers who are noted in the disability pass can accompany the person with disabilities for free.

Persons with disabilities may sometimes also take with them **support other than human carers**. For instance, in Austria and Germany, they can take a dog with them free of charge, and in Germany – also a bike.

Qualification of people for such schemes usually is limited to sub-groups of people with disabilities, according to national criteria. For instance, the Austrian discount applies for those who are 'at least 70% disabled', free travel in Germany for those with an extraordinary walking disability and the blind (anyone with the symbol 'G' and 'H' in their disability pass), free public transport in Athens and Thessaloniki for those who are 'at least 67% disabled' and discounted sea travel for those who are 'at least 80% disabled', and free public transport in Riga for persons with disabilities 'group I and II' (and all persons with disability below 18 years of age) and their carers only for persons with disabilities in group I (and all persons with disabilities below 18). Coverage of schemes for persons with disabilities thus differs largely between Member States. The Irish scheme seems to be among those with the largest coverage: 190,000 people, or 3.8% of the Irish population, qualified for free travel due to being in receipt of a disability related primary payment (19% of all people entitled to free travel in Ireland).

Unemployed people

Fewer examples were found of countries or localities providing public transport at reduced user costs to the unemployed. In Greece, unemployed people (registered at the OAED, the public employment service) can use public transport for free since 2016. From 2020-2021, though, non-residents in the respective region lost this entitlement for Athens and Thessaloniki buses, and Athens metro, tram and electric railway. In Zagreb (Croatia), unemployed persons with disabilities are among those entitled to free public transport.

Sometimes, schemes focus on reducing the cost of travel to training facilities. In Hungary, unemployed people can travel at 90% discount from home to the place of training. In Malta, since 2016, individuals who participate in training sessions to enhance their skills to find a job benefit from a free public transport credit to attend their training sessions and job interviews.

Retirees

It is rather common in the EU that retirees can travel at reduced fees or even for free. Usually, countries apply an age limit, entitling to free (Malta for 70+, Hungary for 65+, Ireland for 66+) or reduced fee travel (the Netherlands and - for trains - Germany from 65, Slovakia for 62+). Sometimes the entitlement is connected to receiving a pension. For instance, in Denmark and Sweden there is an age limit (65+), but below that limit pension-recipients also qualify, including early retirees and disability pension recipients. In Hungary people aged 65+ are entitled to free public transport. However, survivor and early pension recipients below 65 (and their spouse/caretaker) are entitled to 16 return journeys a year at 50% off and 2 return journeys 90% off. Sometimes free national transport is limited to a certain transport mode. In Slovakia, retired persons are entitled to free train travel.

Municipalities also provide discounted or free public transport travel. In all Slovak municipalities, people aged 62+ receive a discount. In some municipalities older people can use public transport free of charge; for instance, in Žilina and Prešov persons aged 70+ are entitled to free travel on all public transport. In Lithuania, Vilnius applies the 50% discount for retirees on city public transport, and substantial discounts for persons 80 or older; Klaipėda City Municipality from 2022 applied 50% discount for state pension recipients (for annual or semi-annual tickets for local bus), and 96% discount for persons aged 70+ for annual tickets for local buses.

Some countries and localities have recently expanded schemes to reduce public transport user costs for older people. In Slovenia, people 65+ from July 2020 became entitled to free intercity train transport, and from October 2021 also to free city bus transport in Ljubljana and Maribor. In Malta, the age at which free public transport is granted has been brought down in 2021 from 75 to 70.

Children/young people

In the EU, children under a certain age are often entitled to free public transport, without the need to register (under 7 in Greece, under 6 in Slovakia, under 5 in Ireland, under 4 in Malta and the Netherlands). Then, up-until a more advanced age, they are often entitled to reduced fees (Ireland - 5 to 18, Netherlands - until 11 on buses, Greece - 7 to 18 are entitled to 50% discount on city transport) or free of charge (until 16 on trains in Slovakia; until 11 on trains in the Netherlands), usually with the need to register for certain cards (sometimes at a small flat fee).

Sometimes support based on young age extends well beyond these ages, and there are several examples where the schemes offering discounted or free travel for young people have been expanded recently. For instance, in Malta, people aged 14 to 20 are entitled to free public transport. In Greece, people aged 7-18 are entitled to a 50% discount on urban public transport. From January 2022, the region Andalusia (Spain) provides a 20% discount to residents under 30. In metropolitan areas this discount is added to the existing 30% discount on the general card, bringing the total discount to 50%.

In Ireland, since May 2022 people aged 19-23 years receive a 50% reduction in fares on all subsidised public transport.

Some schemes reduce public transport user costs for large families. Greece for instance provides the 50% discount on urban transport also for families with four children or more, so for the parents as well. In Lithuania, since 2020, 20% discount to train travel applies to holders of a family card (for tickets purchased online). Kaunas City Municipality introduced reduced rates for children aged 7-18 from large families.

Pupils/students

In **Croatia**, primary and secondary school students, and fulltime university students, are entitled to reduced rail and coastal public transport fees. In Romania, from 2017, 50% reduced tariff for domestic railway for students up to 26 years (previously limited to 4 yearly trips). Students who are orphans or who are from children's homes can travel for free. In Riga (Latvia), pupils and vocational students are entitled to free travel. In Slovakia, pupils and students from 6 to 26 are entitled to free rail travel, and to reduced fees in local public transport. In some municipalities they can use public transport for free (e.g., in Žilina for pupils up to 16 years of age).

In **Greece**, students of all levels of public education residing at a distance from school, are entitled to free public transport. Other students travel at reduced fees. In Finland, since 1997, pupils living at distance from their primary school, and paying more than a certain amount for transport, are entitled to financial support. From 2021, the minimum distance was reduced from 10 to 7 km. From August 2022, secondary school pupils also qualify, in line with the extension of compulsory education to secondary education (up to the age of 18) (Eurofound, 2022b forthcoming). Those who pay more than €54 per month for traveling to their school qualify. Some municipalities add to this national scheme. For instance, in Kouvola, all students in secondary education institutions receive a free monthly ticket.

Slovakia in 2017 entitled primary school pupils to free public transport to school if there is no school in their municipality or school bus by the municipality or school. A key goal was to increase attendance among children from low-income households. In 2021, when primary school became compulsory from age 5 (previously 6), the minimum age of entitlement was decreased to 5. Schools refund the fare monthly to the pupil's parent, upon demonstration of the tickets. An evaluation revealed some gaps in the effectiveness of the measure (NKÚ, 2021). The allowance is not usable if there is no connection between the child's home and the school and does not cover the parent's fare to accompany the child to school. Furthermore, children who live in remote settlements of the municipality (often Roma) are not entitled to the allowance, as it is only provided for commuting to different locality. However, they can have long commutes to the part of the municipality where the school is located.

Other groups

The groups above are by no means all target groups of schemes that offer discounted or free public transport for people in vulnerable situations.

Other groups qualifying for reduced fee/free public transport include people traveling to healthcare providers (in Hungary, which in 2020 also included dental care), children in foster care (Hungary), people with refugee status (entitled to free public transport in Greece), people living in remote parts of the country (residents of Greek islands are entitled to reduced sea travel), and war veterans (in Slovenia, entitled to free train, and from 2021 free city bus).

During the pandemic, for instance Hungary offered free public transport for groups of essential workers (from late 2020 until 18 June 2022).

Russia's invasion of Ukraine, with the resulting refugee crisis, has led to public transport entitlements for Ukrainian refugees. In Slovakia, demonstrating a Ukrainian ID/Passport qualifies people for free

travel from the Ukraine-Slovak border to other parts of Slovakia. In Bulgaria, Sofia entitled Ukrainian citizens who left Ukraine after 24 February to free public transport from March 2022 until June 2022 (upon demonstration of a passport or registration card with a personal number); a similar measure applies in the city public transport in Vilnius (Lithuania). In the Netherlands, Ukrainian refugees travel for free, but only while entering the country or to reunited with family members.

General reduction of user costs

For all travel

While reporting in this chapter focuses on targeted measures for groups in vulnerable situations, general measures that reduce public transport fees tend to benefit low-income people disproportionately as well, as they rely more on public transport. The reporting here focuses on support. However, there have also been developments to the contrary. Public transport has often become more expensive on the whole in several countries, and networks were reduced. For instance, in **Poland** in January 2022, prices of train tickets were increased considerably (on the same day gasoline prices were reduced).

An example of a general measure reducing transport fees comes from **Portugal**: 21 intermunicipal communities and 2 metropolitan areas reduced and simplified public transport tariffs in 2019. Another example includes the ‘€365 ticket’ in **Germany**, an annual subscription to local public transport. However, sometimes up-front payment of larger amounts is needed, which can be a problem for some households. Ireland in Spring 2022 also reduced public transport costs nation-wide for the first time in the last 75 years, by around 20% (with larger cuts for young adults – see above) (RTE, 2022). In Germany, in 2022, a €9 monthly ticket was introduced to travel on public transport for June, July, and August. In Spain, to alleviate the impact on inflation in 2022, several medium distance (commuter) train routes were made for free, and other public transport ticket costs were reduced from September to December 2022.⁶⁵

Public transport is also sometimes provided for free to everybody, nationwide (Luxembourg since 2020; Malta - buses from October 2022), or locally (Tallinn in Estonia; from April 2022, metro and trams in Valencia). In **Lithuania**, free passenger transport has been approved in 4 out of 60 municipalities (in Tauragė since 2021, and Mažeikiai, Raseiniai and Varėna since 2022). Some other municipalities (e.g., Trakai district) are also considering the idea of free transport (LRT.lt, 2022), while others (e.g., Plungė Municipality) have discontinued free passenger public transport (PRST, 2022). Free public transport has been introduced in the context of discussions on a car pollution tax, which might result in higher cost for using private transport (Tizenhauzienė, Mizgirdė, 2021). An advantage is also that a general measure such as free transport for all customers does not single-out people, which may lead to stigmatisation or non-take-up, depending on how it is implemented. Local evidence supports the notion that also after introducing free public transport, it mainly benefits low-income groups. For instance, in Mažeikiai (Lithuania), five months after the introduction of free public transport, increased passenger flows were recorded. Users were mainly people without their own transport or those on low incomes, schoolchildren, seniors and socially disadvantaged people (eBus, 2022).

In **Malta**, a study by Caritas Malta (2020) on three low-income categories, gives an idea of savings by specific groups benefitting from the widening of the free public transport provisions. According to this study, an older couple aged 65+ spent €208 annually on public transport. Since 2021, those aged 70+ save this amount as they travel for free. Two adults with two children spent an average of €980

⁶⁵ [Ayuda al transporte público: qué comunidades autónomas van a aprovechar la subvención del 50% y cuáles no \(xataka.com\)](https://xataka.com/ayuda-al-transporte-publico-que-comunidades-autonomas-van-a-aprovechar-la-subsolucion-del-50-y-cuales-no)

annually, while a single parent with two children spent €688 annually on public transport. While younger children could already travel for free, since 2021 these amounts would be reduced by that of older children (up to 20 years) now also travelling for free.

Investment on certain dimensions of public transport (including offering free travel), can fail to reach people with bad access to public transport on other dimensions (such as reachability of stops, physical accessibility, adequate frequency and operating hours, ensuring safety for users – Eurofound 2018; 2020a). Reports of experience with free travel implementation confirm this. For instance, free train travel for groups in **Slovakia** does not benefit people from remote areas without rail. They can travel only by bus which does not offer free of charge travel under the same conditions as rail. Moreover, free rail travel lead to a decrease in sale of long-distance bus tickets and closure of national long-distance bus lines (Kašík 2022a;b; Kyp 2019).

Home-to-work travel

Several schemes across the EU still stimulate car usage rather than cleaner transport alternatives for commuting. In this report, though, the focus is on facilitation of public transport use. Examples of promoting the use of public transport for commuting include the following:

- In **Estonia** as of 2020, compensation for the ticket price of the public transport used to transport employees between their home and work is not subject to taxation.
- In **France**, already since long ago, employees in the private sector who use public transport (metro, bus, tramway, train, bike hire) to get to their workplace are entitled to partial reimbursement of these expenses by employers. Reimbursement is made at 50% of the 2nd class fare based on the shortest journey. Only season tickets are paid for by the employer. They can be annual, monthly or weekly. Reimbursement by the employer is made monthly (including for annual season tickets) by the end of the month following the purchase of the ticket. Partial reimbursements of the price of season tickets are exempt from income tax.
- In **Hungary**, a measure in place since 2015 has been adjusted: from 2022, employers can subsidise travel from the employee's residence to the workplace (as well as from the residence to the permanent home if different from the residence) and back, up to four times a month, tax-free. Employers can reimburse tax-free 86%-100% of the cost of a monthly season ticket on long distance travel. If an employee has a disability or a child of 10 years or younger, and the employee cannot use public transport (because it does not exist or because of a disability), the employer can compensate up to 60% of the travel costs free of taxes.
- In **Luxembourg**, cross-border workers benefit from reduced rates on public transport on the most used railway lines (e.g. Nancy-Metz-Luxembourg, Arlon-Luxembourg, Trèves-Luxembourg) and certain buses.
- In **Spain**, using commuter trains was made free from September to December 2022 (see above).

Digital ticketing: overcoming barriers and finding alternatives

This section briefly discusses digitalisation of the purchase of tickets, user barriers posed by digitalisation and measures taken to address these. This relates to affordability as many of the schemes outlined above are available digitally. For instance, in **Denmark**, persons with disabilities need to apply for their (and their travel companion's) reduced fee with their digital ID.

Overall, it should be noted that digitalisation can improve access. Digital purchase of tickets can prevent time-inefficiency and physical problems associated with queuing to buy tickets. Also other forms of digitalisation in public transport have great advantages for users. For instance, digitalised

real-time information can reduce waiting times. Furthermore, apps have been developed to support persons with disabilities in their use of public transport. In the **Netherlands** several apps are applied to guide persons with disabilities in their use of transport (GoOV app; Step ear); in Sweden, for the visually impaired, an app applies digital ushering and Augmented Reality techniques are used to help individuals with their public transport trips (Vinnova, 2022).

However, digitalisation has also created access problems. In **France**, the abolition of ticket offices in stations and the closure of the stations themselves have caused difficulties for users to purchase train tickets (Défenseur des droits, 2022). Furthermore, the transformation of an increasing number of stations where travellers cannot purchase a ticket before boarding the train, prevents some users from obtaining a ticket before boarding. This is particularly the case for users without a smartphone, including many persons with disabilities, older people and people with very low incomes. When options to buy tickets without (or with more limited) needs for digital skills are still available, they may come with extra costs. For instance, in Czechia, the Office of the Ombudsman raised the issue that an electronic train ticket includes a seat reservation for free, while a ticket purchased at the counter requires fee payment for a seat reservation.

A Dutch study found that people apply coping strategies when confronted with digital problems on public transport and that their social network is the main safety net. Family, friends and colleagues can offer support, for example by guiding, reassuring or taking over tasks. Within the transport system itself, the respondents called on fellow passengers or staff. Some deliberately planned longer journey times or carefully prepared the journey at home. In extreme cases, they choose to use public transport without a ticket, to return home without finishing the trip, to travel by another mode of transport or not to travel at all. People also tap into formal help, through courses or from volunteers. The study was based on in-depth interviews with older people, people with a non-western migration background and people with a lower education level, including low-literates and people with a mild cognitive impairment (Kennisinstituut Mobiliteit, 2021).

Measures to specifically address access problems due to digitalisation in public transport seem to be rare, and in several Member States none were identified (e.g. Estonia, Latvia, Slovenia). Many of the initiatives to address digital exclusion are more general. Sometimes support for digitalisation in public transport is explicitly part of broader digital support packages. This is the case for instance in the European cooperation project 'Digital Skills for People Living in the 3rd Age - Effective Digital Access to Public Services' (United Kingdom, Netherlands, Bulgaria, Czechia, Spain, Greek Municipality of Karditsa) aimed at training older adults to develop specific digital skills needed to access public services online. In **Sweden**, digital inclusion measures include increasing older people's digital knowledge, for instance with events organised by pensioners societies, where pensioners can get information from public transport actors on how to use the phone applications (Tebini et al, 2020). However, often public transport is not explicitly part of such broader approaches. An example of such broad approaches includes the Digital Inclusion Charter in Belgium, as well as many initiatives aiming to improve digital literacy generally (e.g., the project 'Digital Literacy' in Croatia).

Member States also often offer multiple ways to buy a ticket to prevent digital exclusion. Usually these would include the option to buy a paper ticket at a physical desk. When privately provided, publicly set contractual requirements tend to include such alternative options. Simplifying digital systems can also contribute to reducing such barriers. In **Romania**, as an alternative to using an app, in many cities one can pay for travel or subscriptions via a single SMS. In Barcelona (**Spain**) and Sofia (**Bulgaria**), since May 2021 people can use public transport simply by taping their bank cards from any bank. This has been the case in a growing number of Polish cities (and already since 2014 in the London underground).

Key findings and policy pointers

Key findings

A wide array of measures to reduce the cost of public transport for groups in vulnerable situations emerged from this research. It includes measures for persons with disabilities, carers, unemployed, retirees, children, and students. Reduced tariffs are a particularly common approach. Free of charge public transport usage is rarer, but can be found nationally (Luxembourg, buses in Malta) and locally (municipalities in Estonia, Lithuania, Poland) for all the population. Free of charge public transport usage is most common for children under 4 or sometimes older (such as in Greece, Ireland, Malta, the Netherlands, Slovakia), while sometimes for older (Ireland) or persons with disabilities (e.g., Germany, Ireland, Malta). Rarely, public transport benefits are in the form of credit which can be spent on various types of public transport (e.g., in Utrecht, Netherlands).

Reducing user costs of public transport generally benefits lower incomes and other groups in vulnerable situations more than the affluent groups, and can also contribute to addressing climate change and environmental degradation. In the context of the EU's efforts to leave nobody behind in the transition to a climate neutral economy, it may seem desirable to reduce public transport costs for low-income groups or for all citizens (such as in Ireland, Luxembourg) - albeit from an environmental perspective caution should be taken in over-stimulating travel (Spain tried to address this by facilitating free travel only after the holiday period). However, public transport cost increases have also been reported (e.g., in Greece, Poland).

Measures to reduce user costs of public transport are rarely targeted at people on low incomes specifically, but rather at other groups, such as older people and persons with disabilities (ESPN, 2020). Many of them are expected to have lower incomes. However, many low-income earners who are not part of these groups also experience problems to afford public transport. They should not be overlooked.

Public transport can stimulate improved air quality, physical activity, and traffic safety. It can thus contribute to reducing health problems, including problems leading to disabilities, and deaths. This benefits lower social economic groups disproportionately as they are more exposed to these risks, and comes with wider economic and social benefits for the persons involved as well as for society.

The magnitude of public transport discounts and groups who are entitled to them in some countries are substantial, such as entirely free cross-country travel for people above a certain age (Ireland) or for all citizens (Luxembourg). However, there are also population groups and countries in the EU which lack such entitlements.

Municipalities often go further in reducing public transport costs for certain groups than national measures. In some countries schemes are mainly set by regions (e.g., Italy). This leads to intra-Member State inequalities.

Few examples were found of cost reduction specifically for people with low incomes. An exception includes a local measure in Utrecht (Netherlands). Furthermore, minimum income benefit calculations sometimes include budget for public transport.

Few examples were also found of cost reduction for unemployed people specifically (besides transport to training facilities or job interviews): such as in Greece, but the benefit for unemployed was reduced there recently.

While reduced fees or free travel for persons with disabilities and their carers is common in the EU, there are large differences with some schemes involving much wider groups of persons with disabilities than others.

Children usually travel for free on public transport – the eligible age is mostly set at under 4 years (and often applied to under 7, too). The risk of reduced access to transport for children (and reduced disposable income for households spending on public transport for children) emerges usually when children are older than the age until which they can travel for free.

Digitalisation is being applied in public transport use, for instance of ticket purchasing systems, real time information, and in travel planning. This facilitates access, but also creates access problems. For instance, when non-digital alternatives are provided for ticket purchasing, these may address access problems, but can be more expensive for the user than digital alternatives and may pose further barriers to access (e.g., waiting times).

Policy pointers

The importance of affordable public transport

Policy makers interested in enabling groups in vulnerable situations in accessing services, training and work can seek to step-up cost reduction of public transport use. People with low incomes and other groups in vulnerable situations disproportionately depend on public transport. Reducing user cost of public transport thus is of benefit to them in particular. Many schemes discussed in this chapter do even more so, as they target groups among which people in vulnerable situations tend to be over-represented. Women more than average depend on public transport for access to work and services since often they do not have other transport options (for example, a car). Investment in access to public transport more generally can thus also contribute to the EU's gender equality strategy.

Complementing information on household income with information on access to goods and services, including to public transport. When household income is compared within or between countries, it is important to also take differences in entitlements to reduced-cost or free public transport (and other services) into consideration. For instance, children and older people with incomes just above the poverty line may be worse off in countries or areas where they have limited or no access to public transport (and other services) than where they have widely free access to good public transport. To reduce the negative impacts of child poverty, countries can expand the entitlements of children up until more advanced age (and not only up until 7 years or even younger as several Member States do).

Enhancing resilience by providing public transport as a viable alternative. Reduction of public transport costs, together with improved availability and accessibility, can contribute to resilience, by providing people with an affordable alternative in case of fuel price increases, freeing-up resources for their household's other expenses, and facilitating access to services and social contacts. 'Forced car ownership' and indebtedness due to private transport means can be useful indicators to identify groups which could benefit.

Public transport can be responsive to needs; its potential in supporting people in vulnerable situations can be exploited better. Many examples were presented of Ukrainian refugees being entitled to free public transport, usually upon showing their passport. User cost have also been reduced as a response to rising inflation. Such measures demonstrate that countries can use public transport to improve living conditions of groups in vulnerable situations. This could be mirrored for

instance by stepping-up access to free transport for children, to reduce the negative impacts of child income poverty.

Looking beyond affordability alone

Access to public transport needs to be improved along dimensions beyond affordability alone.

Reducing transport costs does not improve access if other barriers are dominant, such as lack of high-quality public transport networks, when people do not feel safe enough to use public transport, or when public transport has been designed in ways which exclude use by persons with certain disabilities. There are groups in vulnerable situations which do not benefit from user cost reductions, even if public transport were free of charge. Other measures need to be considered to reach them, including improving access to public transport on dimensions beyond affordability alone. It is important to consider needs by users and (current) non-users when seeking to improve access to public transport, including for persons with physical or intellectual disabilities. A comprehensive perspective on access should thus be taken (Eurofound, 2020a). Otherwise, access to public transport cannot be guaranteed, failing to enforce this right established by the European Pillar of Social Rights.

Inform policies by the objective of people's travel, rather than merely on transport features only.

ESPN (2020) notes that 'without an assessment of these people's actual transport needs, there is no evidence that the support is being adequately channelled to those who are most in need of assistance.' This can certainly be important. However, at the same time it should also be acknowledged that transport needs are not a given and can be influenced by policies. Access to transport is not a purpose in itself. Policy makers should focus foremost on making sure people can get where they need to get, not only looking at the means to get there, but also considering the objective of people's travel. This implies that measures beyond transport should receive more attention. These include digitalisation (facilitating teleworking, e-healthcare, e-government services), improving access to services nearby people's homes, and improving access to good quality homes nearby services and work.

Do not take schemes that reduce public transport user cost for certain groups at face-value.

Carefully consider the groups covered and the extent to which they are actually used. Entitlement criteria differ widely. There can further be a multitude of reasons for the right to be entitled to these schemes not effectively being enforced, for instance due to lack of implementing entitlements automatically (Eurofound, 2015). Furthermore, bad access on non-financial dimensions (lack of adequate networks, etc. – see the first point in this section on 'Looking beyond affordability alone') limits the effectiveness of such schemes. Furthermore, persons with disabilities who need support may not benefit from schemes which fail to facilitate access to their carers. Children from low-income households may still have bad access to public transport if their parents cannot afford to accompany them. Overall, formal entitlement criteria should be considered alongside actual take-up data and user experiences, demonstrating to what extent transport needs are actually satisfied.

Prevent stigma. To reduce stigma, measures could apply to broader groups or be implemented in ways that the user cannot be identified as belonging to a specific group in a vulnerable situation when using public transport (e.g., by providing a mainstream season ticket or discount card). This prevents discrimination, and non-take-up.

Variety in local measures risk inequality and non-take-up. Many support measures are municipal. This allows for a wide variability of criteria in deciding who is entitled to such support (ESPN, 2020). While possibly responsive to local needs, such local approaches also come with risks. Firstly, it risks exacerbating inequalities between different localities within Member States, with richer

municipalities better able to provide support. Second, the wide spectrum of different measures risks non-take-up, as it can be challenging for those entitled to be informed about entitlements.

Seek digitalisation in ways that benefit everyone. Policy makers should investigate simplification of digital systems, to address access problems due to digitalisation but also to make sure that currently digitally excluded groups benefit from the advantages of digitalisation. For instance, simplification of payment/ticketing systems can contribute to this (such as payment to any public transport by tapping any bank card, being charged the most favourable tariff – at least providing a solution for the digitally excluded groups who do have a bank card).

Promote public transport along with even greener and affordable opportunities for active mobility, enhancing resilience. Especially in urban areas, where the vast majority of the EU population lives, policy makers should caution to overly focus on public transport alone. They should also seek to stimulate even healthier and greener active modes of mobility: walking - with or without a walker or buggy -, moving around in a wheelchair, and cycling. Such mobility may be used in combination with public transport and is particularly affordable for users. Policy makers can facilitate such green and affordable mobility, and further enhance its contribution to population health and safety by investing in appropriate infrastructure: high quality networks of wide pavements and cycle lanes. This also contributes to resilience, as physical infrastructure cannot be as easily dismantled as benefit systems (European Parliament, 2020). The pandemic has triggered some advances in this direction, for instance by the creation of temporary cycling lanes and wider footpaths in multiple cities. It remains to be seen whether in post-pandemic times policy makers continue going this way, taking bolder steps to facilitate active mobility.

Consider public transport in conjunction with broader social protection measures. While this study investigated cost reduction of public transport, measures to increase income (e.g., minimum income schemes) can also improve affordability of public transport.

Digital communications

For quite some time, advances in digitalisation have been both a source of optimism for making technologies and information more accessible to many people and a source of concern about a potential digital divide between those who have and those who do not have access to digital communications. The pace of development in digital communications is relatively fast since they are a major element in contemporary economy, raising a challenge for the population to keep up their skills as users of digital technologies even in the common areas of the daily communication tools. At a fast pace, digitalisation is also becoming a common feature of delivering and administering public services, and in this respect, ensuring accessibility of various services to all citizens has gained a new dimension. In a recent period of the COVID-19 pandemic, using digital devices for social contacts, work communication, and especially education of the schoolchildren and students was increasingly seen as essential. Missing such tools or internet connection could become an impediment for adapting to the new reality of physical contact restrictions, telework, and online schooling, and also for reducing the need for commuting when work and studies can be done remotely. Internet access sometimes becomes debated as a public good or an essential service to have, and therefore equitable access to digital communications for all people, including those in disadvantageous situations or with limited incomes, is relevant for the policy agenda.

For the purposes of this report, ‘digital communications’ refer to the means and channels for digital communication and for using digital devices. In practice, it is mostly about the quality access to internet and any barriers for such connection as well as for making good use of it for the needs of a user.

EU policy context in brief

Digitalisation, including improving the connectivity and the ICT user skills for participating in future economy and society, is firmly on the agenda of the EU Member States. The policy goals around digitalisation also stand out at the EU level as a strategic policy direction. The access to digital communications is a subject in various respects, as seen in a sample of the EU policy measures:

Universal Service Directive (2002, amended 2009/136/EC) covers availability and affordability of access to internet. The transposition of the principles of universal service provision was taking place in several Member States throughout 2021, including Estonia, Lithuania, Luxembourg; the legislation was in preparation in Slovenia in spring 2022 (at a time of writing; but this Directive is not in focus here - DG CNECT is monitoring the transposition);

EU funds for infrastructure, such as ‘WiFi4EU’ functions as a support initiative that enables public bodies to provide free internet connection (includes schools and hospitals);

The 2020 EU’s digital strategy ‘Shaping Europe’s digital future’ recognises digital literacy and skills being important both for jobs and for participation in contemporary society;

The [Digital Compass](#) sets out an aim for 80% of EU citizens aged 16-74 years old to have at least basic digital skills by 2030; 70% by 2025 according to [European Skills Agenda](#) (in 2021, it was 54%);

In addition, digital transformation (as well as related skills) is one of the 6 pillars of the RRF and therefore a key dimension in the EU funding.

DESI (Digital Economy and Society Index, since 2016) is the EU's monitoring measure to track progress on digitalisation. It should be noted that the calculation of digital skills indicator changed in 2021 (based on 5 competence areas of the revised [Digital Competence Framework \(DIGCOMP 2.0\)](#)).

With regard to developing digital skills in European societies, there are the following upcoming EU initiatives:

- Recommendation on improving the provision of digital skills in education and training (non-legislative, Q3 2022)
- Recommendation on the enabling factors for digital education (non-legislative, Q3 2022)

In this broad European policy context, the Member States also pursue their own digitalisation pathways. In order to assess whether they apply measures to ensure all social groups are taken along, this chapter overviews national measures for assisting underconnected groups, including those on low incomes. It also focuses on what type of challenges on the continuum of access to the digital communications (from availability and awareness to receiving services and meeting needs) are addressed, and where the potential gaps remain.

Underconnected groups and support measures

According to DESI report, 92% households in the EU had subscription to internet in 2021. 78% of households had overall fixed broadband internet (41% had at least 100mbps fixed broadband); at the same time, 87% of individuals were using mobile broadband (European Commission 2022e).

87% of individuals were regular internet users (using it at least weekly), while almost 80% were using it either every day or almost every day. Nevertheless, there are still countries where a considerable proportion of people are not using the internet, for example in Bulgaria and Greece where one in five individuals has never used it. In comparison, only about 1% or less of the adult population in Ireland, Sweden and Luxembourg have never used the internet (European Commission 2022f).

It must be noted that some measures in the Member States aiming to advance digital inclusion are devoted to strengthening the capacities of the service providers, and therefore are not focused on the end-users of digital communications; however, this overview is primarily dedicated to measures for the end-users and especially the barriers they may experience.

Improving general connectivity

Several national evidence sources with regard to population's access to internet provide information on percentage of households having such access (the focus being also on broadband access); some have information on the mobile network coverage (4G or 5G).

The national plans and programmes have the targets for providing access to internet to the households, and some include the specific connectivity standards. In Denmark, that tops the list of EU Member States in terms of connectivity (DESI 2022), there is no issue of take-up of access to internet and the focus is on advancing digital technologies and improving their take-up by the workforce and enterprises. Other targets range from, for example, providing all households with at least 100 Mbps by 2025 in Finland to more stepwise targets, such as very high level connection coverage to about a half of the households (while ensuring the 100 Mbps fixed broadband connection to other 33% households) in Bulgaria (see below). While the fixed broadband in households remains a relevant

measure, the need for a fixed connection may decrease somewhat with the advancement of mobile connection coverage (as suggested in Finland's review).

Country examples of the current connectivity targets

Finland has a target by 2025 to provide internet connection for all households of at least 100 Mbps. **Sweden**, while having ambitious general strategy to benefit from high level digitalisation, relies on setting a minimum standard based on the concept of adequate, or functional, broadband internet ('grundläggande internet' or 'funktionell tillgång till internet' in Swedish): according to PTS, until 2018, the level was 1Mbit/s but it was raised to 10 Mbps in March 2018 (PTS, 2022).

In **Austria**, the goal of the Austrian Broadband Strategy 2020 to provide nearly all Austrian residences with fast broadband connections by the end of 2020 has not quite been achieved, even though large investments have accelerated the expansion of the network infrastructure (Friesenbichler et al. 2021).

In **Germany**, the federal government adopted a funding programme in April 2021 that targets so called 'grey spots', or the areas where the download bandwidth is below 100 Mbps (around €12 bn will be made available to promote fibre-optic links there over a period till 2025).

'[Estonian Digital Society 2030](#)' plan sets the target of everyone having access to internet at least at 100 Mbps by 2030, compared to 58% in 2021. Although the target of providing such access to all population has been shifted previously, the funding via the National RRP foresees relevant actions in this area, including improvement of connectivity in less populated areas.

In **Bulgaria**, the national broadband infrastructure plan 'Connected Bulgaria' includes goals of improving connectivity in peripheral or rural areas and overcoming the digital divide, however, assistance to specific groups having issues accessing the digital communications are not yet detailed. Bulgaria plans using RRF funding for large investments in connectivity, and its 2020 'Connected Bulgaria' plan includes targets such as covering 52% of households by the very high-capacity fixed network (VHCN), while ensuring the 100 Mbps fixed broadband connection to 33% households.

Some Member States, where the access to internet is nearly universal such as **Denmark**, focus not on the access as such but on implementing access to digital training and education (for everyone in the labour force including the self-employed during the 2020-2023, as per Danish parliament decision of 20/06/2020)⁶⁶.

To sum up, national plans to advance the connectivity tend to highlight the gaps in territorial coverage and aim to extend the availability of quality connectivity in the less populated, remote or so far underserved areas. Even though the expansion of the technical infrastructure does not target persons or households and does not use income criterion, it may be the areas where the segments of population on lower incomes live. In order to ensure the take-up and use of the new technical opportunities once they are enrolled, countries could consider additional measures: as the case of countries with the advanced level of connectivity shows (DK example above), the space for upskilling of users still remains even when the technical possibilities to use the digital communications are abundant.

⁶⁶ DESI country profile (2022) [Countries' digitisation performance | Shaping Europe's digital future \(europa.eu\)](#) (Last checked: 28-02-2022)

Providing internet access as an essential service

In 2020, ESPN (p.88) reported only two countries (Germany and Finland) with some kind of a mechanism ensuring basic and/or uninterrupted access to the service. Based on the NEC input in early 2022, Finland and Germany retained such provisions, while Portugal has introduced a temporary guarantee against cut-off from 'electronic communications' in the context of the pandemic (see below). The underpinning for such provisions seems to have been further debated at least in Germany (see Busch 2021), but the provisions have hardly changed substantially in other Member States.⁶⁷

Finland considers broadband connection as an essential service and thus universal broadband service is ensured by the Finnish Transport and Communications Agency (Traficom). Persons with hearing and speech impairments have special provisions since a broadband connection enabling video connection is considered essential (Traficom, 2020). Although without reference to concept of essential services, standards were set to ensure accessibility of websites and mobile applications for public services providers in **Slovenia** (update of the ZDSMA Act in 2021).

Germany amended its Telecommunications Act (Telekommunikationsgesetz, TKG) at the end of 2021; it explicitly obliges to provide adequate standard of voice and internet connection in urban and rural areas ("equivalent living conditions in urban and rural areas and a high common level of protection for end-users"), and foresees further regulations by June 2022 to detail the affordability and adequacy of access to these communications is ensured. The amended Act specifically mentions that rights to access have to be respected for the end-users of services with disabilities, in older age or with 'special social needs'.

The rise in telework and reliance on internet for distance learning during the pandemic has contributed to debates on how essential internet access is. In February 2021, the **Belgian** network of ombudspersons adopted a resolution in which it considered access to internet to be a 'social necessity' and called on the federal, regional and local governments in the country to recognise access to internet as a basic need that requires specific legal protection, and to take the necessary measures to ensure it.⁶⁸

In the meantime, **Portugal** adopted a 'guarantee for access to essential services – electronic communications': this temporary and exceptional measure was established in the context of the COVID-19 pandemic (Decree-Law 56-B/2021 of 7 July and amended by Decree-Law 119-B/2021 of 23 December) and set out that until 31 March 2022, the supply of essential services such as electronic communications cannot be suspended. If there are debts related to the provision of these services, a payment plan adequate to the current income of the consumer must be prepared, within a reasonable time. Until 31 March 2022, consumers who are unemployed or with a drop in household income equal to or greater than 20% compared to the previous month's income can apply temporary suspension of telecommunications contracts, without penalties or additional clauses for the consumer, resuming on 1 April 2022 or on a date to be agreed between the supplier and the consumer.

In **Estonia**, according to the Electronic Communications Act, connection to a communications network in a fixed location enabling telephone services (Art. 69) is considered a universal service and it is specified that it also must enable the use of data communication services sufficient to permit

⁶⁷ however, more scrutiny in checking this could be applied via EC (CNECT) review of the Universal Service Directive transposition that is meant to take place in 2022.

⁶⁸ See <https://www.ombudsman.be/nl/nieuws/resolutie-over-de-toegang-tot-internet>

functional Internet access, taking into account the hardware and software used by most of the end-users (Art. 70). The disconnecting for reasons of delayed payment or other specific breaches is regulated by the act, however the pricing is not so: a maximum fee to gather from the end-users is specified in the Act, however it only covers telephone connection fee and not internet service. In **Lithuania** in 2021, similar legal provisions were adopted in ensuring that the providers of digital communication services cannot refuse a contract (services) to low-income persons or social benefit recipients (see further below).

Malta authorities have explicitly considered the reduced tariff options for people on low incomes in context of universal service obligations⁶⁹ and continue providing reduced tariffs (see more in 'Reduced tariffs' section). Thanks to those measures, as well as to high internet penetration and a wide availability of free WiFi access, particular cases of inaccessible or unaffordable internet connection have not emerged.

In **Ireland**, awareness around importance of uninterrupted supply of services increased during the COVID-19 pandemic, however, only voluntary commitments by providers were made without providing users with the formal rights. Whereas during the Covid-19 pandemic there was a ban on energy suppliers disconnecting customers, this did not extend to communications providers. Still, the major communications providers signed up to a voluntary program to help people through the crisis (*'So that customers can remain connected during the crisis, service providers will engage with any customer that contacts them who is in financial difficulty as a result of COVID-19 and has difficulty paying their bills to agree the best way of keeping them connected to voice and data'*). One of Ireland's leading charities (St Vincent's De Paul) called on government to institute a wider moratorium on disconnections during the pandemic stating *"more important than ever that vulnerable and marginalised groups can stay connected with loved ones and access up-to-date health advice. We are also concerned that children in low income families will fall behind on their schoolwork if they do not have access to internet services."*⁷⁰

Supporting the low-income groups

As has been noted by the ESPN (2020), a relevant indicator on cost-related barriers for accessing digital communications is the percentage of population who **cannot afford internet connection for personal use at home** (SILC (2015)). Typically, a share of such population is higher among the people at risk of poverty – by three times (2015 data, ESPN 2020:85). By and large, the distribution of this indicator between the EU countries seems similar to that of the risk of poverty⁷¹.

The DESI (cf ESPN 2020) has reported on the **households who do not have internet access at home**, and their reasons for not having it. The three main **reasons** (no need or interest, insufficient skills, and cost-related barriers) have varied prominence across the Member States.

It could be interesting to see if the countries with highest proportion of people that cannot afford internet at home (such as Romania, Bulgaria, Greece and Hungary, according to the 2015 data, ESPN 2020:85) or where the cost barrier is a prevailing reason for households that do not have internet

⁶⁹ See: Malta Communications Authority, Review of Universal Service Obligations on Electronic Communication Services, 28 08 2020, 4.5 Reduced Tariff Options for Users on Low Incomes or on Special Social Needs. P.16. <https://www.mca.org.mt/sites/default/files/Review%20of%20Universal%20service%20obligations%20in%20ECS%2C%20Consultation%20and%20Proposed%20Decision.pdf>

⁷⁰ SVDP 2020, Press Statement: Internet companies should halt disconnections during Covid crisis

⁷¹ A qualitative observation so far (precise correlation not tested).

(53% in Portugal according to DESI 2020) have policy measures to address these factors. On one hand, even in the Member States with lowest DESI index scores, the rate of fixed broadband coverage was rising rapidly – reaching 90% (reported in Romania) in 2020. On the other hand, Member States with lower scores of their overall DESI index such as Romania do not have measures to assist the low-income groups directly. They have mostly used in-kind support to the groups in need in the last two years, which was largely the equipment to assist with online learning during the pandemic (such as devices to schools or pupils).

Cash benefits

To address the barriers for affordability of digital communications, some countries apply very **specific targeted allowances** (e.g., **Germany's** defined component within a minimum income benefit). Some have a system of general social allowances to support one's overall income level such as Finland; in a neighbouring Sweden, telephone expenses are foreseen by the social allowance system (ch.4 of Social Services Act 2001:453) but internet is not specified. However, even in the welfare system of general income support such as **Finland's**, there are additional allowances⁷² at municipal level that may be used to cover extra costs for digital communications. In **Sweden**, too, municipalities that administer the social allowances may decide to cover one's internet costs but this is not an entitlement. It may change in the future - the Swedish National Digitalisation Council recommends costs for internet to be included in the supporting regulation to the 'state norm' ('riksnormen för försörjningsstöd' in Swedish) that defines what the basic social allowance needs to cover (food, clothes, telephone etc.). If the costs for using internet would be added to the definition of the supported income, all recipients of social allowances would benefit from it automatically (the Swedish National Digitalisation Council, 2019; Ekot, 2021).

Reduced tariffs

Social tariffs (whereby some providers offer a specific reduced tariff to receivers of social benefits or groups based on other criteria), exist in Austria, Cyprus, Italy, Malta, and Slovenia since before the reporting period (2020). There have also been developments in the last two years in designing such **tariffs**:

Belgium's new, comprehensive telecom law (adopted in 2021, will come in force in 2022) revised the regulations around the social tariffs by telecom operators. Whereas the specific target groups to whom social tariffs apply largely remain as before (persons on minimum income, low-income elderly people and low-income people with disabilities, whose annual household income is below income threshold for enhanced reimbursement of healthcare costs), the new legislation aims to extend the law to mobile telephone/internet access; it obliges to index the social tariffs (last done in 2005), and will apply the social tariff to the eligible users automatically. Although the precise figures of non-take-up of social tariffs for telecommunications are not reported, the complexities of claiming such tariffs are recognised and the new measure is expected to address this problem.

Portugal, in November 2021, updated the social tariffs for provision of fixed or mobile broadband internet access services (Social tariff for provision of fixed or mobile broadband internet access services ([Tarifa social de acesso à Internet em banda larga](#))). It is aimed at ensuring affordability for

⁷² supplementary social assistance [*täydentävä toimeentulotuki*] and preventative income support [*ehkäisevä toimeentulotuki*]

consumers from vulnerable socio-economic backgrounds or with special social needs that, for financial reasons, are excluded from access to essential digital services.

The **Malta** Communications Authority ([MCA](#)), the national regulatory authority of the electronic communications sector has through a designated provider continued to provide reduced tariff options so that persons who have affordability issues, may have access to such universal services. The designated provider is currently offering a reduced 'line-rental' tariff scheme to eligible subscribers who have been identified by the government. A number of criteria established by the Ministry for the Family, Children's Rights and Social Solidarity are required to be met in order to benefit from this assistance; low-income users and people with special needs are noted as target groups.⁷³ The MCA considered that since this scheme has met its objectives it should therefore be continued.⁷⁴ Figures published in September 2021 indicated that in 2017, 3,687 individuals benefitted from this reduced tariff scheme.⁷⁵

Hungary, in January 2022, raised the standards for maximum download speed in its *Digital Welfare Basic Package*⁷⁶ (in place since 2017), which entitles the beneficiaries to the low-priced internet access packages. The eligibility was also broadened (no longer limited to those who previously had no connection at all, as has been in the 2017 version).

Lithuania does not yet have specific tariffs applied in practice, however, the amendments to the law were made in 2021 (Law [No IX-2135](#)) that transpose the provisions of the European Electronic Communications Code obliging the providers of electronic communications to ensure the availability and affordability of the minimum set of electronic communications services of specified quality for people on low incomes and recipients of social benefits. The affordability indicator and assessment of how affordable services are is being carried out⁷⁷; nevertheless, the providers from now on cannot refuse contracts for digital communication services to, for example, social benefit recipients (for the purpose of this overview, this shall be considered as a variant of 'ensuring supply').

Although the attention to the adequacy and affordability of internet access is increasing (as seen the developments around social tariffs), the existing policy measures for people on low incomes may need to be updated, such as in **Cyprus** and **Italy**. In Cyprus, the reduced tariff (50% of the regular) applies to fixed (landline) internet connection but not for the mobile/wireless internet services (note that such extension of social tariffs has been done in Belgium, for example). However, many households in Cyprus do not possess landline telephones, the majority of the lowest income households are in this category. Moreover, according to data provided by the Statistical Service of the Republic of Cyprus,

⁷³ See the pertinent legislation: <https://legislation.mt/eli/cap/318/eng/pdf>

⁷⁴ See: Malta Communications Authority, Review of Universal Service Obligations on Electronic Communication Services, 28/08/2020, 4.5 Reduced Tariff Options for Users on Low Incomes or on Special Social Needs. Page 16.

<https://www.mca.org.mt/sites/default/files/Review%20of%20Universal%20service%20obligations%20in%20ECS%2C%20Consultation%20and%20Proposed%20Decision.pdf>

⁷⁵ See: Malta Communications Authority, Review of GO plc's application for funding of the net cost claimed to have been incurred to provide universal service obligations during 2017, 02/09/2021, Social tariffs (2). Page 24. <https://www.mca.org.mt/sites/default/files/Consultation%20and%20Proposed%20Decision%20on%20GO%27s%20USO%20claim%20during%202017.pdf>

⁷⁶ <https://digitalisjoletprogram.hu/hu/tartalom/dja-digitalis-jolet-alapcsomag>

⁷⁷ The study was initiated by Lithuania's Communications Regulatory Authority and started on 28/04/2022 (<https://www.rrt.lt/telefono-rysys-internetas-tv/paslaugu-kainos-kokybe/universalioji-el-rysiu-paslauga/>), the results were not yet available at a time of writing.

use of wireless telephone and internet services is widespread even in low-income households. Although there are no issues regarding service availability, the affordability of these services for low-income people is concerning since expenditure by these people for wireless telephone and internet services is significant. In **Italy**, there has been no recent update of the discounted tariff (50% of a regular monthly tariff) for the low-income users regarding access to the fixed-line telephone network and a basic internet connection by the universal service provider TIM (the service includes 30 minutes of calls to any national number for free). It should be noted that the price of the discounted service may in fact be higher than the market offers of a mobile connection that cover calls and data⁷⁸.

In-kind support

Some countries provide support for installation of means broadband internet connection, with or without combination with reduced tariffs for the connection itself. This support is often defined in terms of its monetary value, however, the expenditure may only happen for the specific good or service, therefore it could be considered as the in-kind type of measures (although in practice it could be about cost coverage, i.e. financial/cash measure). An example of such could be the support administered by Sweden's Post and Telecom Authority (PTS) for those who cannot get broadband via a private supplier. The individual applying for the support shall pay SEK 5,000 (€500) for the installation of broadband, the rest is covered by the state (PTS, 2022).

Many countries provided in-kind support to pupils and students to enable remote learning online during the pandemic.

In some Member States, these type of measures (in-kind support to students) were the only type identified in terms of targeted support for accessing digital communications in the last two years, such as in Bulgaria, Czechia, Greece, Poland, and Romania; Poland has adopted several highly targeting measures addressing, for example, teachers involved in delivering remote education (500 PLN grant for purchasing equipment in 2020), pupils in orphanages, and supporting children and grandchildren of former state-owned farm (PGR) workers. Many of such measures were temporary by definition (addressing the necessity for education online due to pandemic-related restrictions), whereas some were of a more permanent nature such as provision of teaching aids, compensatory aids or special software for students with disabilities, as reported for Czechia.

The measures to support remote learning varied in focusing on either devices or also support for internet connection, and in their target groups, such as focusing on pupils with disabilities, on pupils from vulnerable backgrounds, or more broadly on those who lacked the necessary devices or internet connection (Eurofound 2022b). (The measures focused on students are not included to Table 3.1 under the 'support measures for low-income groups' due to their very specific focus and mostly temporary nature, however, it has to be noted that in most cases the description of such measures

⁷⁸ The standard monthly fee for a fixed network connection by the universal service provider TIM is €18.87, while the discounted fee is €9.44 (<https://www.tim.it/assistenza/info-consumatori/fisso/agevolazioni-economiche>). TIM has also committed to provide, whenever possible, a standard 7MB ADSL connection at a 50% discount rate. This is an obsolete type of connection, which was offered at a flat monthly rate of €21.90; the reference discounted fee would be €10.95. The threshold of the annual household income (the Equivalent Financial Status Indicator known as ISEE) for eligibility for these discounted connections is €8,112.23 (<https://www.agcom.it/agevolazioni-per-il-servizio-universale>). For reference, the current TIM offer for mobile connections, including 50 GB of data with a 5G connection, unlimited calls and SMSs, is provided at a flat monthly rate of €14.99 (<https://www.tim.it/fisso-e-mobile/mobile>). Some low-cost providers have lower rates: for instance, Iliad offers 80 GB and unlimited calls and SMSs at €7.99 per month or 40 GB and unlimited calls and SMSs at €4.99 per month (<https://www.iliad.it/offerte-iliad-mobile.html>).

specify that ‘financial situation of the family’ would be considered in allocating support with devices for online learning).

However, some countries had the pandemic-period measures that targeted a broader group than students: such as the connectivity benefit to low-income households in Italy⁷⁹, Digital Voucher programme (2021-2023) for vulnerable households in Spain. In Hungary, in the background of the pandemic, the government introduced an extraordinary measure requiring internet service providers to offer free internet access to teachers and families with children in secondary education.

Although the in-kind support discussed above mostly refers to provision of means for accessing the digital communications, there are new initiatives in terms of assisting/servicing people who lack digital skills or have other difficulties to practically use the digital communications. This type of in-kind measures and informational support that address the digital skills gaps seem to be a growing area of intervention, and it is discussed in a dedicated subchapter below.

Addressing digital skill gaps

In many Member States, training measures are a popular type of action to address the lack of digital skills, however, the scale and scope of these measures differ a lot, and rarely the criterion of low income is at the centre; instead, there is a variety of broad target groups through which some people on low incomes can be reached too.

Targeted actions to improve digital literacy, including training

‘Digital skills indicators are some of the key performance indicators in the context of the [Digital Decade](#), which sets out the EU’s vision for digital transformation. The [Digital Compass](#) sets out an aim for 80% of EU citizens aged 16-74 years old to have at least basic digital skills by 2030.’ In 2021, 54% of people in the [EU](#) aged 16 to 74 had at least basic overall digital skills.

Source: Eurostat ([data](#) on digital skills indicators: <https://ec.europa.eu/eurostat/en/web/products-eurostat-news/-/DDN-20220330-1>)

The concepts seen across the national measures to tackle the implications around lack of connectivity or skills include ‘digital marginalisation’ (Finland runs a national AI project ‘AuroraAI’ to improve access to digital services and combat ‘digital marginalisation’) and ‘digital exclusion’, in response to which specific measures are adopted, such as a Digital Inclusion Charter in Belgium (initiated by the ‘DigitAll’ in 2021). Many Member States have programmes that engage various public, private and not-for-profit actors into engaging with groups that are less savvy in terms of digital skills than others. Target groups chosen for such measures reflect who are seen as lacking sufficient skills: for example, older people or young people under risk of social exclusion.

Some research identifies the groups that are at particularly disadvantaged in terms of their digital skills level, such as young people and especially NEETs in rural areas in Bulgaria and Romania. It was found that their digital inclusion and virtual mobility directly relates to positive effects on their local communities (Neagu et al., 2021), thereby providing a case for investing in supporting such groups. (For more on skill sharing and actions at community level, see a section below).

⁷⁹ When the measure was in force in Italy in 2020-2021, it provided €500 for low-income households, defined as those with an annual income below €20,000 (based on the Equivalent Financial Status Indicator known as ISEE). The funding could be used to buy high-speed internet connection of at least 30 Mbps and a tablet or a PC. The beneficiary had to choose a certified provider and the fastest available connection at their location.

However, those Member States which so far had limited measures for targeting access to digital communications to specific groups, have prioritised focusing the support on what can be seen as enablers: for example, in Bulgaria, a HelpDesk was established to serve the school IT administrators to assist the roll out of digitalisation in the public education system (from handing out and use of devices for distance learning to support in using the electronic means for exams and admissions).

Certain Member States have explicitly targeted the skills of the job seekers, for example:

Spain's 2021 [National plan for digital skills](#), apart from overall update to the curricula of compulsory education with coding and programming skills 'as element of literacy', also contains measures for creating VET programmes of digital training as well as specific targeted measures (such as "Digital literacy training for unemployed persons hired within the framework of the Employment Promotion Plan in Agriculture sector (PROFEA).")

The **Finnish** Parliament adopted a continuous learning reform in December 2020 which aims to increase the competence level of working-age persons. Digital skills are a component of the reform and the project developing the content of the service package is running until the end of 2024. However, the information on the impact of such schemes on improving labour market outcomes for these target groups is limited. In order the future policies would become more effective, making such information more accessible could be encouraged.

There seems to be a set of training measures across the Member States to reduce digital illiteracy or improve digital proficiency via assistance and skill-sharing.

Many countries have rolled out measures to provide support to schools and students for education online during the restrictions to physical meetings. Some countries aimed to address certain groups of staff to facilitate the overall process of **digitalisation in education** by improving the expertise of the technical administrators in schools as well as developing the digital skills of teachers. In Bulgaria, it was about establishment of an informational support helpline for IT queries by the Ministry of Education (as already mentioned above); in Germany, a *DigitalPakt Schule* was updated in November 2020 to allocate €500 million to fund professional IT administration and support structures, that must have had digital training measures foreseen (*DigitalPakt Schule*, n.d.).

Other than the specific priorities of the pandemic, the following attempts at training, assistance of skill sharing have been noted:

In **Belgium**, there is the Digital Belgium Skills Fund (since 2016), which funds projects that aim to strengthen digital skills of socially vulnerably individuals, mostly the young. One of the programmes funded is BeCode, an organisation that provides different types of training on digital skills (from a few weeks to several months long, from basic to advanced) (<https://becode.org/nl/over-ons/projecten/digital-belgium-skills-fund/>). There are also a range of measures under the federal and regional 'relance' programmes, adopted around 2021, that foresee informational and other support with a focus on (diverse) vulnerable groups.

In **Estonia**, the government has implemented several digital skill development projects over the years, of which many were targeted at children. The adult training programmes were specifically targeted and included advanced ICT skills (to provide more labour force for the ICT sector), [digital literacy improvement courses](#) mainly targeting library workers and people aged 50+ (2012-2021), and the unemployed (via the Unemployment Insurance Fund). In 2021, there were public-private partnership projects between public agencies and Google, whereby the company provided free virtual training on

applied digital skills for general public (online contents, social media marketing, etc) and donated funds for training for the Estonian Trade Union Confederation (courses for the [employees](#) as well as for [leaders](#)).

In **Greece**, a number of public-private partnerships for delivering digital skills training took place in the last couple of years, some in the framework of the [National Coalition for Digital Skills and Jobs](#). For example, the Hellenic Manpower Employment Organisation (OAED, the public employment service) carried out training projects across the country in cooperation with Google, Microsoft, Amazon, and held training courses for the unemployed, some targeting the young unemployed, and requiring knowledge of English language. Some of those courses had extension into traineeships. Worth highlighting for the case of Greece is the IOM supported project for assisting the IOM target groups (refugees, migrants, and asylum seekers) in using digitalised public services. [HELIOS project](#) staff have been remotely supporting the beneficiaries on a one-on-one basis on using digital services, such as the issuance and renewal of unemployment cards and e-registration to Vocational High Schools.

In **Slovakia**, a breakthrough in developing digital skills for certain target groups (including elderly, Roma, and students in primary, secondary and tertiary education) is planned for the future – with the help of funding expected from 2022 onwards via the national [Recovery and Resilience Plan of Slovakia 2020](#).

However, there can be situations where there is an instant need to use digital tools, such as for accessing public services. The advancing digitalisation of administrative services, including in relation to social security and benefits, present a challenge for their users to stay up-to-date and sufficiently skilled to use the effective channels for raising their needs and receiving support. Specific schemes for referencing the clients towards appropriate assistance, training or peer support were not often reported, but is a potential area for policy development. For instance, in **France** since 2021, [Aidants Connect](#) platform enables temporary mandate for authorised professionals to carry out formalities on behalf of persons lacking digital literacy (e.g. fill in forms for admin services or social welfare).

In **Lithuania**, too, attention is growing to digital public services, with a focus on their quality, accessibility (including for persons with disabilities) and attractiveness, coupled with improvement of digital skills (DS) among socially vulnerable groups (in particular among persons with disabilities) (VSPP, 2021); this is addressed by Lithuania's 2021-2030 [programme](#) for people with disabilities. However, there is a view that the national Recovery and Resilience Plan ([New Generation Lithuania](#)) pays insufficient attention to effectively ensure that public services provide content that is accessible to people with disabilities. Regarding rapid digitalisation of public services, Lithuanian anti-poverty network has also highlighted cases of people living in poverty who need assistance to overcome difficulties in filling in applications or registering online; moreover, people in poverty often are not aware about measures and entitlements to them that are placed on the websites for them (NSMOT, 2021)⁸⁰.

Addressing generational differences in internet use

In certain countries with the highest levels of internet coverage in the EU (e.g. the Nordic countries, the Netherlands), the internet penetration is close to universal which contributes to the fact that affordability of access and preventing the disconnection is not prominent in the public discourse. However, even in such national contexts that are also characterised by digital skills above the EU

⁸⁰ NSMOT (2021) Pokyčių forumas: skurdą patiriančių žmonių istorijos. Available at this [weblink](#).

average, it is recognised that some groups such as the older people may lack skills and could not catch up with rapid digitalisation of public services (a debated concern in Finland).

The concern about older people has led to special programmes for their digital inclusion, such as the DigitalPakt Alter in Germany (August 2021). Amongst other things, the German initiative provides live streams on a diverse range of topics (such as safe online shopping, using Siri, Alexa and similar services etc.) or an overview of local initiatives providing practical support to aged persons. The initiative has also provided micro grants for 100 projects supporting development of aged persons' digital skills at the local level. For example, the projects deliver consultation services on using digital devices, offer meeting places for aged persons where they can also discuss any digital issues they might have.⁸¹ Other than that, there are examples such as a phone [helpline is operated by German Caritas](#) to guide or assist older people with practical user skills. The not-for-profit organisation [PIKSL](#) provides similar assistance to people with disabilities. In so-called laboratories, persons with no disabilities and persons with disabilities can meet to work on digital issues. Workshops are held to teach basics in using digital devices, browsers, social networks, email services etc.

Poland runs the 'Centre for projects Digital Poland' ([Centrum Projektów Polska Cyfrowa](#) (CPPC)) that uses both national and EU funding (including React-EU). This entity supports non-governmental organizations, local government units and universities of the third age, aimed at supporting teachers in the field of modern technologies in their daily work with students, which will make it easier for them to navigate the digital world, allow them to use e-educational materials and create their own e-resources. To promote action at a local level, the CPPC runs a [Digital Commune](#) (*Cyfrowa Gmina*) project (though the proportion of its activities for training cannot be identified at the moment). Other than that, Poland uses European Funds for Social Development 2021-2027 (FERS) for the [Digital development clubs](#) that will be created in libraries, community centres or universities of the third age that already exist. Also, there are numerous local initiatives such as the [program to increase digital competences](#) of Wrocław residents. A problem with numerous relatively small local initiatives is, inter alia, the lack of evidence for assessing their effectiveness and efficiency.

Accessibility of internet for older persons in the otherwise highly digitalised Swedish society is addressed by policy seriously due to a wide use of 'e-legitimation' in accessing digital public services. In 2020, the Post and Telecom Authority PTS was commissioned by the government to contribute to accessibility of internet for the elderly due to the COVID-19 pandemic. PTS launched a website called [Digitalhjälpen](#) which provides guidance on how to use different digital services. PTS has also created a network in order to improve coordination among actors responsible for digital inclusion. In addition, they carried out information campaigns aimed at elderly in digital exclusion (PTS, 2021).

Initiatives in the Member States to address loneliness of the older people during the pandemic often included assisting them with means and skills to communicate online (Eurofound 2022a).

⁸¹ An overview of the projects under DigitalPakt Alter is available at this [weblink](#).

Preventing the digital divide: Evidence available at national level to inform policies for digital inclusion

Whereas it was possible to obtain an overview of what types of groups are seen as needing skill development, evidence is much scarcer on the scale of their upskilling efforts and the impact achieved. Organising a systematic evidence collection in this regard could help improve policy development and effectiveness. For overview purposes, a list of relevant references is presented in Table 3.2 (end of chapter).

Although several pieces of evidence suggest that lower-income groups tend to have more limited digital skills, most reported measures for digital literacy development do not seem to be based on income criterion. Instead, they target groups in relation to, for example, age (the older people or the young people). For example, data on how low household income relate to higher levels of having no internet access are reported in the sources of national statistics in Germany (Statistisches Bundesamt, 2021b), and some subnational data also have pointed to the fact that using internet was lower in the low-income groups, and among the women and older people within the low-income groups (Ministerium... Nordrhein-Westfalen, 2020). Nevertheless, the largest programmes for supporting digital inclusion or skill-sharing tend to target other criteria than income, such as exhibited by the federal initiatives DigitalPakt Schule and DigitalPakt Alter.

Preventing the digital divide: public infrastructures

It appears that utilising *existing networks or infrastructures* can be a basis for addressing the digital divide – as an example, public libraries are meant to serve as hubs where free internet access is provided. However, the density, accessibility, attendance and support services in the libraries may differ across countries.

The engagement of the public library network in the Netherlands stands out thanks to a suite of measures that simultaneously address the connectivity, the skills, and the referral to services:

The **Netherlands** have adopted a suite of interlinked measures to promote digital literacy and proficiency, and to prevent digital exclusion. These measures were funded or co-funded by the national government and were rolled out evenly across the country: Digital Government Information Points (IDO) in public libraries (200 IDOs in mid-2021, to reach 400 by end of 2022 and to be available within 1.9km radius for any citizen); Klik&Tik training course in basic online literacy available for free at IDOs and online; ‘Digital help line’ via phone so those who cannot come to IDOs but are in need of guidance can be assisted; ensuring accessibility of the governmental websites to people with disabilities; and proactively targeting digital literacy campaigns⁸². All this has been foreseen in the Dutch Digitalisation Strategy (2018) and implemented over 3-4 years. The access to digital communications is also assured via the provision of devices (#4,#5). There are monitoring tools to track and improve the activities of the libraries and the programmes such as IDOs or training courses.

In **Finland**, preventing digital marginalisation in the course of digitalisation is addressed at ministerial level; since 2017, there is the ‘Digi arkeen’ – the advisory board set up to highlight potential concerns

⁸² For instance, in 2021, the measures for improving digital literacy were directed at seniors, ‘technostressed’ workers, 18-year olds and children.

related to the digitalisation of public services. This board includes representatives from the public sector and non-governmental organisations as well as researchers.

In **Belgium**, the Digital Inclusion Charter was set up in 2021.

It was noted in **Greece** that the national coalition for Digital Skills and Jobs (an initiative started by the European Commission) plays a role in facilitating digital skills training and skills-sharing activities, whereas in other Member States the coalition is less engaged or less visible.

Key findings and policy pointers

Key findings: main types of measures supporting access to digital communications in the Member States

- In-kind support has been applied much more widely during the pandemic (before 2020, it used to be a case in several Member States only) and was a type of measure encountered in most Member States during 2020-2021. Countries with lower scores of their DESI index such as Romania have mostly used in-kind support to the groups in need in the last two years, which was mostly the equipment to assist with online learning during the pandemic (such as devices to schools or pupils).
- A number of countries using reduced tariffs increased since 2020. A progressive development in area of reduced tariffs was noted in Belgium, where the decisions were taken to index the social tariffs, to cover mobile as well as landline internet access, and to apply the social tariff to the eligible users automatically, thereby addressing a problem of non-take-up. However, in case of Cyprus and Italy, the conditions around reduced tariffs (available for landline internet only) are outdated since they contrast with the contemporary pattern of using mobile/wireless internet by large proportion of internet users in these countries.
- Cash benefits are applied in some countries only – such as very specific targeted allowances (e.g., Germany's defined component within a minimum income benefit, Finland's and Sweden's supplementary social assistance).
- There are Member States where there are no measures specifically targeting low-income groups.
- Provisions for basic/uninterrupted supply exists only in a limited number of Member States (Germany, Finland as before, and Portugal since the pandemic) and suggests that there has been limited policy progress towards firmer foundations for securing access to internet as an essential service.
- Advice/informational support measures are widespread and mostly provided universally (to any interested users), but their impact is rarely assessed systematically. Training projects are often small-scale, at grass-root level.

Policy pointers for preventing digital exclusion

Although several pieces of evidence suggest that lower-income groups tend to have more limited digital skills, most reported measures for digital literacy development do not seem to use income criterion. Instead, they target groups in relation to, for example, age (the older people or the young people). Some small-scale projects exist that target youth suffering social exclusion.

Whereas it was possible to obtain an overview of what types of groups are seen as needing skill development, evidence is much scarcer on the scale of their upskilling efforts and the impact achieved. Therefore the following policy pointers can be suggested:

- Organising a systematic evidence collection on impact of training and skill development measures could help improve overall policy development and effectiveness.
- Potentially, more projects could be carried out with the EU support in training/e-inclusion.

Utilising infrastructures and existing networks can be a basis for addressing the digital divide – as an example, public libraries are meant to serve as hubs where free internet access is provided. However, the density, accessibility, attendance, and support services in the libraries may differ across countries. The following specific policy pointers can be suggested:

- Consider creating a set of complementary measures that include informational support, basic assistance and training to address the problems of the digitally under-skilled or under-connected groups. As a possible good practice, consider a suite of interlinked support services delivered through the network of public libraries in the Netherlands.
- Appropriate institutional arrangements could help sustain relevance, continuity and learning in developing measures for preventing digital exclusion. In search for good practices, consider Finland's advisory board to highlight concerns related to digitalisation of public services and Belgium's Digital Inclusion Charter.

Table 3.1. Measures in place to support access to digital communications for people on low incomes

	Reduced tariffs			Cash benefits			In-kind benefits			Ensuring basic/uninterrupted supply of service			Informational support to users		
	National	Regional	Local	National	Regional	Local	National	Regional	Local	National	Regional	Local	National	Regional	Local
AT	1			1											
BE	1							1						1	
BG															
CY	1														
CZ							1								
DE				1			1	1	1	1					
DK															
EE															
EL							1								
ES							1								
FI						1				1					
FR							1						1		
HR													1		
HU	1						1						1		
IE															
IT	1						1								
LT										1					
LU													1		
LV															
MT	1						1								
NL	1						1						1		
PL							1								

PT	1									1				
RO							1		1					
SE						1	1							
SI	1						1							
SK														

Notes:

This table is created as an update to the ESPN (2020) Table A6, using the NEC input covering 2020-2021 (and early 2022).

Shaded background is used if the measure is newly introduced or was updated after 01.01.2020.

Since national measures based on a distinctive criterion of low-income are rare, this table includes measures that are based on other criteria or are universal, thus have relevance to people on low-income indirectly or in combination with other criteria. Connectivity benefits or support to purchasing devices that provided cash for the strictly defined purchase types are considered here as 'in-kind'.

Source: Eurofound (based on the inputs by the Network of Eurofound Correspondents), 2022

Table 3.2. Main studies that provide (evaluated) evidence about the impact of digital inclusion measures, per country, 2020-2021.

AT	-
BE	The digital inclusion barometer (2020), funded by the King Baudoin Foundation and carried out by VUB and ULB, based on the 2019 survey of the ICT use by households and individuals. It highlighted inequalities in access to digital communications, digital skills, and the limited use of administrative and other services online.
BG	-
CY	-
CZ	-
DE	-
DK	-
EE	-
EL	Alexopoulou, S. (2020), Digital divide in Greece reviewed , Örebro University: the paper highlights the ‘grey digital divide’ and spells out practices, including from other countries, that could help develop practical digital skills for older people in Greece.
ES	<p>ONTSI (2022). <i>Uso de tecnología en los hogares españoles</i> [Technology use in Spanish households]. Available in: https://www.ontsi.es/index.php/es/publicaciones/uso-tecnologia-hogares-espanoles-2022</p> <ul style="list-style-type: none"> ○ The report highlights that households with the lowest incomes are the most affected by the digital divide: slightly more than 289,000 households with incomes below €900 per month do not have Internet access. There are also many, slightly more than 200,000 households with incomes between €900 and €1,600 per month that do not have access to the Internet. <p>Hernández, L. and Maudos, J. (2021). <i>Competencias digitales y colectivos en riesgo de exclusión en España</i> [Digital skills and groups at risk of exclusion in Spain]. Madrid: Fundación Cotec para la Innovación Tecnológica. Available in: https://cotec.es/proyecto/competencias-digitales/51a02688-a11f-4fee-b047-41288ea0e0ac</p> <ul style="list-style-type: none"> ○ Educational attainment, occupation and age are the three most important determinants of the digital skills gap, as opposed to gender, which is much less statistically significant. ○ For example, being older than 55 increases the probability of having low skills or no skills at all by 23.1%. The difference between basic and intermediate education represents 17.6% more likely to reach an advanced level of digital skills, rising to 36.2% if higher

	<p>education is attained. The difference from being unemployed to being employed increases the probability of having advanced digital skills.</p> <p>FAD (2021). Diagnóstico para la acción. Mapeo de centros de difícil desempeño y análisis de competencias digitales de las familias en situación de vulnerabilidad: Informe de resultados [Diagnosis for action. Mapping of difficult-to-perform centres and analysis of digital competences of families in vulnerable situations: Results report.]. Madrid: Fundación de Ayuda Contra la Drogadición.</p> <p>This study finds an access of 3.4 students per computer on average (with an efficient Internet connection) in the context of public educational centres.</p> <p>Only 35% of public schools have an efficient broadband connection. Private educational centers have more efficient Internet access in the vast majority of cases compared to public centers.</p>
FI	-
FR	
HR	As part of the Digitalna.hr project, the Network for the Development of Digital Literacy is researching the needs of developing public policies for digital inclusion of vulnerable groups - the elderly and people with disabilities and residents of rural areas and islands. The report is expected in 2022.
HU	-
IE	NESC (2020), <i>Digital Inclusion in Ireland: Connectivity, Devices & Skills</i> report pointed out some key barriers to accessing digital communications in areas of connectivity, skills gaps, and lack of motivation. It also reviewed the Digital Skills for Citizens Scheme (2017- present), which provides for 10 hours of classroom training on basic ICT. Age Action Ireland (2020) have also raised criticism of this training arrangement being inadequate, and advocating for replacing the scheme or adjusting the training (such as focusing on one-to-one mode).
IT	-
LT	-
LU	-
LV	-
MT	-
NL	-
PL	"Uneven quality of Internet access in Poland in the time of the COVID-19 pandemic" (<i>Nierównomierna jakość dostępu do Internetu w Polsce w czasie pandemii COVID-19</i>), 2021: According to the research of the Polish Economic Institute, during the pandemic, as many as 53 percent of all 9 poviats (medium-level local government units) experienced at least one form of digital exclusion due to insufficient internet connection speed.

	<p>‘The problem of digital exclusion in remote education’ (<i>Problem wykluczenia cyfrowego w edukacji zdalnej</i>), 2020, identifies the following major challenges:</p> <ul style="list-style-type: none"> • Lack of broadband internet access with adequate capacity in some areas of Poland, especially in rural areas. There is no data on the exact scale of the problem. • Problems with data limit in mobile access to the Internet - this mainly concerns 50% of children who have pre-paid phones. • Necessity to share the necessary equipment (computers and laptops) between siblings or children and parents. According to the study, this problem affects at least one million pupils (around 25% of all pupils). <p>Lack of competence for distance learning (on line learning) and the use of digital tools among teachers. The study indicates that up to 30% of teachers do not have the necessary basic competences to conduct online learning.</p> <p>Report: Socio-digital exclusion in Poland 2021: motivational exclusion remains the key form of digital exclusion. Almost 66% of people who do not use the Internet justify it with the lack of need, even though - depending on the socio-demographic group - 20-45% of them have a device at home that provides access to the Internet. It turns out that digital exclusion today is more related to a lack of digital awareness and skills than to physical problems in accessing the Internet. The basis for the occurrence of motivational exclusion is low awareness of what the Internet can be used for.</p>
PT	-
RO	Neagu, Gabriela, Muhammet Berigel, and Vladislava Lendzhova (2021), "How Digital Inclusion Increase Opportunities for Young People: Case of NEETs from Bulgaria, Romania and Turkey" <i>Sustainability</i> 13, no. 14: 7894. https://doi.org/10.3390/su13147894
SE	-
SI	-
SK	<p>Bednárík, M., Čokyna, J., Ostertágová, A., Rehúš, M. (2020), Ako v čase krízy zabezpečiť prístup k vzdelávaniu pre všetky deti. Komentár 1/2020. [How to ensure access to education for all children in times of crisis. Analytical Commentary] No. 1, Institute of Educational Policy of the Ministry of Education, Science, Research and Sports of the Slovak Republic.</p> <p>Hamarová, B. C. (2022), Nepripojení. Digitálna chudoba a digitálna inklúzia na Slovensku. Komentár 1/22. 01/2022, [Unconnected - Digital poverty and digital inclusion in Slovakia. Analytical commentary.] No. 1, Institute for Digital and Development Policies. Ministry of Investment, Regional Development and Informatization of the Slovak Republic.</p>

Notes: the requested review period was 2020-2021, though outstanding studies beyond this period may have been brought up. This table omits the basic reports of the results from the survey on the use of ICT by households and persons which is carried out by the national statistical institutes of the Member States in agreement with Eurostat.

Source: Eurofound (based on the inputs by the Network of Eurofound Correspondents), 2022

Conclusion

This overview focused on specific national measures aimed at improving access for people on low incomes to energy services, public transport, and digital communications introduced over the period from 2020 to early 2022. These service areas are specific in terms of their regulatory frameworks, providers, supplies or other features and are rather independent from each other, therefore the concluding messages mostly focused on each area individually, though some overarching considerations are suggested.

Addressing the costs of energy services was an area in which the measures were most numerous and were most dynamically developed during the period covered: most Member States have adopted universal or targeted measures regarding energy costs for private accommodation purposes; some countries also made efforts to reduce the cost of fuel for cars either by regulating the price, changing taxation or by subsidising certain groups. This dynamism is understandable in a context of the continued volatility of energy prices and the challenges in securing energy supplies in Europe. Since before the energy cost crisis, most Member States applied reduced tariffs and/or cash benefits to assist groups in need of support for paying for energy services, however, the bulk of the recent measures adopted across the countries focus on universal measures (non-targeted to people on low incomes only) that could change the cost for the end users. While there are instances of social tariffs (for supported groups) being adjusted, the anticipated impact on people on low incomes or groups in specific vulnerable situations is yet difficult to identify. The public access to evidence used for modelling impact of energy costs as well as of the impact of the newly adopted measures is limited so far: the evidence base for on-going policy adjustments will need to catch up.

Support for access to public transport is characterised by a wide array of measures – many Member States are supporting a range of target groups with reduced tariffs. As has been the case previously, rarely the income criterion for eligibility of such support is directly used, but calculations for the minimum income sometimes include budget for public transport. Some more instances of extending affordable access to more people appeared across the EU recently, even if still in a minority of Member States. The scope of the entitlements for public transport also differs a lot: whereas there are outstanding examples such as public transport being free for everyone in Luxembourg and cross-country travel being free for older people in Ireland, other countries or social groups lack such entitlements.

Reducing costs of services such as energy and public transport benefits people on low incomes or in vulnerable situations disproportionately⁸³, and can help extend a user base of, for example, energy sources or modes of transport that are preferable for improving environmental sustainability.

Across many EU Member States, a vast majority of EU population are regularly using the digital communications. Most countries have ambitious targets to further improve the technical infrastructure for better connectivity. These measures often are focused on territorial units and rarely target the specific individual user (or the remaining non-user) groups, especially in relation to their income levels. However, the in-kind support to students or families with children engaged in online education during the COVID-19 pandemic were applied across the EU but remained the only type of

⁸³ As has been pointed out before, due to the fact that the same expenditure by a person with lower income constitutes a larger proportion of their total expenditure compared to a person with higher income (to whom the same sum would mean a lower share of their total expenditure). Conversely, having the same amount in cost reduction means reducing one's expenditure by a larger share of their income for low-income person compared to a high-income person.

support in certain countries where the overall level of digitalisation is lowest in the EU. A few more instances of social tariffs for installing access to internet and paying for connection/data services appeared in comparison to the past, but there are Member States where affordability barrier for using internet was reported in the past and there are still no measures dedicated to people on low incomes. Provisions for basic/uninterrupted supply of digital communications exist only in a small number of countries and this suggests that the progress towards ensuring of access to internet as an essential service has been limited.

The extraordinary rise in costs of energy explain the need to focus on affordability, first of all of energy services and public transport. However, for all three service areas considered, importance of non-financial dimensions for improving access to them came up – both generally and for people on low incomes due to potential vulnerability of the latter.

In case of energy services, consider the appropriateness of the regulations that protect against the disconnection from services for people in vulnerable situations – to prevent extreme impact on their housing conditions and health; preventing the build-up of situations that lead to a risk of disconnection could also be improved via timely and adequate advisory and support services.

In the area of public transport, the availability of transport networks to meet the existing needs remains an important dimension beyond affordability. Since the digital ticketing and information about public transport services are developing and changing fast, the accessibility of digital ticketing to and take-up by people with disabilities need to be monitored. In a broad social and policy context, certain needs could gain more recognition at present such as in relation to adequacy of transport services to carers; and in regard to increasing a range of options for active mobility. For the green transition to be scaled up, the solutions to greening the mobility could include reducing the needs for energy-intensive travel, such as by improving access to good quality housing near where work and services are located or by connecting them better by infrastructure that prioritises active modes of mobility.

Regarding access to digital communications, there seems to be a trend in the making – for policies to recognise the skills dimension more than before. While access to technical means for using digital communications remains a challenge in several Member States to certain parts of society, the measures are being designed to ensure that the population have skills to not only access, but also to make best use of what the digital technologies and information can offer. However, measuring the impact of the training and upskilling programmes seems yet to be developed in order policy making could be guided by solid evidence.

For any policy measure to make its full impact, the take up and use of the services is essential. Striking an optimal balance between universal and targeted or locally specific measures could be a challenge though. Addressing those most in need and being responsive to community preferences is important, and when the support measures are local, it allows for a broad variability of entitlement criteria and services. However, the heterogeneity of measures raises a risk of non-take-up; also, the equity of services and their quality may be affected between richer and poorer regions or municipalities.

While this report focused rather specifically on identifying particular measures in a recent period, the access to energy, public transport, digital communications or other essential services can also be seen in a broad way as a part of social citizenship and could be promoted via general measures to improve living standards (including income support policies); this could also help building societal resilience long-term. The general social policy context is to be kept in mind when addressing access to essential services in the future – which, on the other hand, has already been emphasised in the European Pillar of Social Rights. The access to paid services could be facilitated by, for example, having good minimum

income schemes or other general welfare measures, and could be complemented by services that are free at the point of use, such as is the case with wireless access to internet in many public places and as the instances of experimenting with free public transport are growing.

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In collecting information on essential services, the European Commission requested Eurofound to provide input on certain aspects of existing and planned measures in the Member States to improve access to essential services in reference to Principle 20 of the European Pillar of Social Rights. For this exercise, the scope was on energy services, public transport, and digital communications, and the focus on people at risk of poverty or social exclusion (in most cases in practice, people on low incomes).

This paper provides an overview of the measures in the Member States based mainly on the inputs from the Network of Eurofound Correspondents, collected in February–March 2022. The paper reviews the measures across the entire EU by clustering the major types or targets of the measures to make essential services accessible, and by succinctly listing main country-level examples. It provides information for understanding the diversity and similarities of the measures applied and suggests pointers on areas where policy action could be developed.

The European Foundation for the Improvement of Living and Working Conditions (Eurofound) is a tripartite European Union Agency established in 1975. Its role is to provide knowledge in the area of social, employment and work-related policies according to Regulation (EU) 2019/127.

