

Figures for the future

SUSTAINABLE DEVELOPMENT IN OUR
EVERYDAY LIFE — A GUIDE FOR CITIZENS

2016 edition



STATISTICAL
BOOKS

eurostat 

Figures for the future

SUSTAINABLE DEVELOPMENT IN OUR
EVERYDAY LIFE — A GUIDE FOR CITIZENS

2016 edition

***Europe Direct is a service to help you find answers
to your questions about the European Union.***

Freephone number (*):

00 800 6 7 8 9 10 11

(*) The information given is free, as are most calls (though some operators, phone boxes or hotels may charge you).

More information on the European Union is available on the Internet (<http://europa.eu>).

Luxembourg: Publications Office of the European Union, 2016

Web

ISBN 978-92-79-63222-8

doi: 10.2785/456498

Cat. No: KS-06-16-212-EN-N

Print

ISBN 978-92-79-63223-5

doi: 10.2785/852838

Cat. No: KS-06-16-212-EN-C

Theme: General and regional statistics

Collection: Statistical books

© European Union, 2016

Reproduction of content other than photographs is authorised provided the source is acknowledged.

For more information, please consult: <http://ec.europa.eu/eurostat/about/our-partners/copyright>

Printed in Luxembourg

PRINTED ON ELEMENTAL CHLORINE-FREE BLEACHED PAPER (ECF)

Foreword of Eurostat's Director-General

The aim of sustainable development is to balance economic, environmental and social needs and thereby improve the quality of life and well-being on Earth for present and future generations.

So, sustainable development is not an abstract concept — it affects our everyday lives and defines the world we hand on to our children and grandchildren. In September 2015, the Sustainable Development Goals (SDGs) were adopted by world leaders at the United Nations Sustainable Development summit. The SDGs mark an important milestone in the progress towards sustainable development.



The SDGs mark an important milestone in the progress towards sustainable development.

Eurostat, the statistical office of the European Union, is committed to providing high-quality statistics on Europe not only for professionals, but for all European citizens. In 2012, Eurostat published a citizen's guide to sustainable development indicators by presenting statistical information through the eyes of Anne, a fictional 17-year-old student. In this first *Figures for the Future* publication, Anne was learning about sustainability by linking statistics to her everyday life. I believe that this new approach of bringing to life facts, figures and trends of sustainable development was very successful. In this new edition of *Figures for the Future*, Anne — now 21 years old — is therefore again in the leading role.

Figures for the Future combines statistical data with Anne's narrative about her hopes and dreams and the people she cares about. Writing a blog about sustainable development as part of her Young Women in Journalism scholarship, Anne refers to events in her and her friends' everyday life and links them to the SDGs. She analyses indicators, provided by Eurostat, to understand what the SDGs mean in the context of the European Union.

I wish you an enjoyable reading experience! And may you also discover that statistics are a helpful tool that can be used to make important decisions about our future.

Walter Radermacher

Director-General, Eurostat

Acknowledgements

Chief editor

Mariana Kotzeva

Executive editor

Mariana Popova (Eurostat, Unit E2 — Environmental statistics and accounts; sustainable development)

Editors

Markus Hametner, Rosanne Adelman, Renate Ruech, Anna Dimitrova, Asya Dimitrova (WU Vienna)

Co-editors

Nicola Massarelli, Anton Steurer (Eurostat, Unit E2 — Environmental statistics and accounts; sustainable development), Carolyn Avery (ENDS, Haymarket Media Group Ltd)

Production:

Production: Carolyn Avery (co-ordinator) and David Young (ENDS, Haymarket Media Group Ltd)

Infographics: Renate Ruech, Anna Dimitrova, Markus Hametner (WU Vienna)

Cover artwork and illustrations: Agtel

Comments provided by

Paolo Bolsi, Fanny Dabertrand, Fabienne Lefebvre, Dorota Panczyk-Piquera, Zoltan Rakonczay

Dissemination

Catherine Coyette, Annika Johansson, Pascal Wolff (Eurostat, Unit B4 — Digital dissemination)

Data coverage and direct links to Eurostat's database:

The data presented in this publication were extracted in late October 2016.

An online data code available under each table/figure can be used to directly access to the most recent data on Eurostat's website, at:

<http://ec.europa.eu/eurostat/data/database>

For more information please consult

Eurostat
Bâtiment Joseph Bech
5, rue Alphonse Weicker
2721 Luxembourg
<http://ec.europa.eu/eurostat>
E-mail: estat-user-support@ec.europa.eu

Disclaimer

All characters and their statements appearing in the narrative of this publication are purely fictional and do not constitute an official policy position of the European Commission.

Contents

Foreword.....	3
Acknowledgements.....	4
1. Anne revisits sustainable development: Welcome to my blog!.....	7
2. Fewer jobs but higher education for the young?.....	11
3. Poverty, its three dimensions and its impact on health.....	15
4. Inequalities between and within countries.....	21
5. More sustainable use of energy?.....	25
6. How well do we treat nature?.....	29
7. How efficiently do we use our natural resources?.....	35
8. Good governance and security in Europe?.....	39
9. Gender gaps in income, employment and decision-making.....	43
10. Where do Europe's jobs come from?.....	47
11. A new agreement on global climate change.....	51
12. Quenching our thirst: A water crisis?.....	55
13. Better and longer lives in the EU?.....	59
14. Anne revisits sustainable development: Where do we go from here?.....	63
Abbreviations and acronyms.....	67

1

Anne revisits sustainable development: Welcome to my blog!

'We are pleased to inform you that your application for the Young Women in Journalism scholarship has been successful...'

Anne is thrilled as she reads the long-awaited letter from the awards committee to her friend and former neighbour Marta. Now she can continue with the research she started in 2012 when she gave a presentation on sustainable development statistics and how they relate to peoples' everyday lives. Marta, a journalist specialising in environmental issues, had given Anne lots of help.

'Tell me more about this scholarship,' suggests Marta.

'It's for investigating current issues and their impact on young people in Europe,' Anne explains. 'And you can guess what I want to investigate. I imagine a lot has changed since 2012.'

'Sustainable development has become even more important,' says Marta. 'You can get up to speed with a look at Agenda 2030, which the UN adopted in 2015. This is based on 17 Sustainable Development Goals or SDGs. The SDGs follow up on the Millennium



Development Goals, which were the UN development agenda from 2000 to 2015. One big difference is that the SDGs need to be implemented by developed as well as developing countries. The central ethos now is “leave no one behind”.

‘Leave no one behind,’ Anne repeats. ‘After my research four years ago, I understood that sustainable development means finding a balance between our need for well-being and good living standards, and the need to preserve natural resources. But when you talk about conservation and cutting back emissions, you can’t tell poor countries simply to do without. Mark reminds me about that whenever I get self-righteous.’

‘Ha! Sounds like that boyfriend of yours is a good influence. So how is Mark?’

Marta takes on a satisfied air whenever she mentions Mark. She takes full credit for getting them together four years ago when they met at the party after Anne’s triumphant presentation.

‘He’s fine. He says hello.’

‘So when you look back, what did you get out of your presentation besides a boyfriend?’ Marta teases.

‘I learned how to “tell a story with statistics,” as you put it, and explain sustainable development with incidents from everyday life. Arguing with my dad, breathing in the emissions in a traffic jam, visiting my grandpa at work and walking through a devastated forest. And thinking about my mum.’

Marta nods. ‘And your strength has been your ability to keep a personal focus. Just carry on... always try to enrich the data with additional context.’

Anne beams at the compliment though she’s trying not to be obvious about it. She’s no longer a shy teenager, but words of praise from her former mentor always go down well.

‘Thanks,’ she says at last. ‘So how do we get personal with the SDGs? Maybe I need a different format for that. Something more open-ended... a framework that encourages ongoing discussion, with space for mixing personal reflection with hard data.’

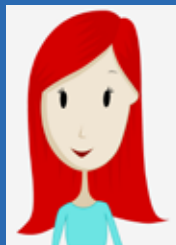
Marta nods. ‘Sounds like you’re talking about a blog.’

‘Yeah!’ Anne exclaims. ‘A blog is always a work in progress — and sustainable development certainly is that. I like it. Once again you’ve given me the winning idea.’

‘It’s not all down to me,’ Marta laughs. She gets up and pushes in her chair. ‘I have to go now, but I’ll see you soon. Perhaps we should come here again. They have good coffee.’

‘Yes, it’s a new place, run by a cooperative. It’s the first time I’ve been here.’

After her friend leaves, Anne orders another cup of Fair Trade Chiapas coffee, gets out her laptop and begins to write...



Sustainable development: A blog from everyday life

#sustainabledevelopment #employment #environment
#SDGs #poverty #young #eurostat

Anne @SustainableAnne | September 29

Hello everybody — this is the first entry in my new blog. My name is Anne and I'm 21. I'm studying journalism and political science, with a strong interest in social issues. I share a flat with my boyfriend Mark, who studies economics, and another student called Zoe.

Over the next few weeks I'll be examining statistics on sustainable development and I'll try to make sense of them in terms of people's lives here in Europe. I'll be writing about myself and my friends and other people I come into contact with.



The statistics I'm going to present will focus on how the EU as a whole — the EU-28 — has developed over the past 10 years. I'll therefore refer to indicators published by Eurostat, such as those used to monitor the Europe 2020 strategy ⁽¹⁾ or sustainable development ⁽²⁾. I'll focus my analysis on the Sustainable Development Goals (SDGs) that were adopted by the United Nations in September 2015 ⁽³⁾, but from a European perspective. I'll not just throw single numbers at you but supplement the indicators with additional statistical information, to put the data into context and strengthen its explanatory power.

As you may realise, I'm not new to sustainable development statistics. I first encountered the world of statistics when I made a presentation just before the Rio+20 environmental summit in 2012 ⁽⁴⁾. And the first lesson I learned was that statistics represent the lives, struggles and dreams of real people...

(1) See <http://ec.europa.eu/eurostat/web/europe-2020-indicators/europe-2020-strategy/headline-indicators-scoreboard>

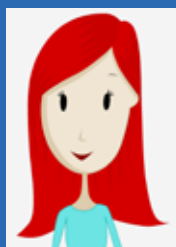
(2) See <http://ec.europa.eu/eurostat/web/sdi/indicators>

(3) United Nations (2015), *Transforming our World: the 2030 agenda for sustainable development*, A/RES/70/1, 25 September 2015.

(4) Eurostat (2012), *Figures for the future — 20 years of sustainable development in Europe? A guide for citizens*, Luxembourg, Publications Office of the European Union.

2

Fewer jobs but higher education for the young?



Sustainable development: A blog from everyday life

#sustainabledevelopment #employment #environment
#SDGs #poverty #young #eurostat

Anne @SustainableAnne | October 3

My friend Sophia, who comes from Greece, says the employment situation for young people there is very tough. But what are her chances of finding better opportunities somewhere else in the EU? Her comments have prompted me to investigate work, unemployment and education throughout the EU. These issues are covered in **SDG 4 'Quality education'** and **SDG 8 'Decent work and economic growth'**.

Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

4 QUALITY EDUCATION

Goal 4 focuses on the acquisition of foundational and higher-order skills; greater and more equitable access to technical and vocational education and training and higher education; training throughout life; and the knowledge, skills and values needed to function well and contribute to society.



I invited my friends Judith and Cat over to talk about this one afternoon. I know Judith from the university science fiction society. She graduated last year with an arts and library science degree, but with cuts to library services she's still unemployed. Cat had been my teacher at school and now teaches in her old inner city neighbourhood.

Mark and Zoe were both out, so I enjoyed a bit of solitude as I tidied up the flat. When my guests arrived I set my phone to record, just like a real journalist.

I started by asking Judith about her new course, a design and digital skills programme available at low cost for unemployed people.

'It's great. I enjoy the classes and soon I'll start getting my portfolio together.'

This sounded like good news, but Judith seemed worried. Why?

'The funding for the programme isn't secure. And you know... sometimes being unemployed turns out to be a full-time job — but without the pay. It involves a lot of hassle, which could get in the way of finishing the course that's most likely to get me a job.'

Cat raised her eyebrows — maybe things were different when she was our age. But anyone pursuing their education eventually gains her sympathy. She told us that many kids at her school don't come to class regularly. Some drop out early and most don't go on to higher education.

Here in the EU, upper secondary education is seen as the minimum educational attainment level. People between 18 and 24 with at most lower secondary education and no ongoing further education or training are 'early leavers'. Statistics show that kids who leave the education and the training system early are at higher risk of unemployment, poverty and general social exclusion (!). I've prepared a graph on Employment & Education to illustrate this.

Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

8 DECENT WORK AND ECONOMIC GROWTH



Continued, inclusive and sustainable economic growth is a prerequisite for global prosperity. Goal 8 aims to provide opportunities for full and productive employment and decent work for all while eradicating forced labour, human trafficking and child labour.

In the EU the overall rate of early leavers from education and training fell from 15.7 % in 2005 to 11.0 % in 2015. This is good news; the bad news is that employment prospects for early leavers have worsened. Since 2005 the proportion of early leavers that are not employed (including those who want to work and those who do not want to work) rose from 46 % to 58 %.

However, youth unemployment is not limited to early leavers. The economic crisis has severely affected the EU's labour market for people aged 15 to 24. In 2015 they faced an unemployment rate of 20.3 %, twice the overall unemployment rate of 9.4 %, which refers to 15 to 74 year olds. People unemployed for one year or more are considered long-term unemployed — like Judith. Since 2008 the long-term unemployment rate has risen by nearly 2 percentage points, which might not sound so dramatic. However, the fact that long-term unemployment accounts for almost half of all unemployed people is alarming.

(!) European Commission (2015), *Education and Training Monitor 2015*.



Employment & Education



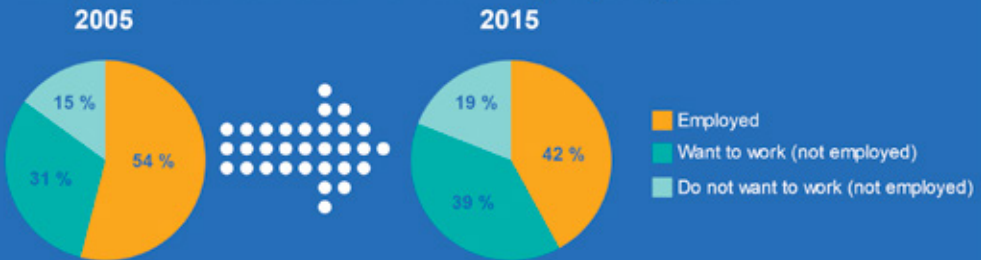
Employment rate by educational level, EU-28, 2015



82.7 % tertiary
70.7 % upper secondary
52.6 % lower secondary or less

70.1 %
employment rate
in the EU
in 2015

Early leavers face deterioration in job prospects



Context

Unemployment

Youth unemployment

20.3 %

of 15–24 year olds were unemployed in 2015



People unemployed for at least one year are long-term unemployed

Share of long-term unemployed among all unemployed people increased from 36.9 % in 2008 to 48.1 % in 2015

Education

Tertiary education rose by 10.6 percentage points among people aged 30–34 from 2005 (28.1 %) to 2015 (38.7 %)



Compared to men, women...

- ▷ are less likely to leave education and training early (18–24 year olds)
- ▷ more frequently attain tertiary education levels (30–34 year olds)
- ▷ participate more in lifelong learning (25–64 year olds)

Source: Eurostat (online data codes: tsdec410, tsdec430, tsdsc330, ifsa_urgaed, tsdsc410, tsdsc480 and tsdsc440)

This made me think about how hard it is to find a good job now, and about the prospects for my generation and those to come. SDG 8 ‘Decent work and economic growth’ focuses on promoting sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all. And what does ‘decent’ mean? SDG 8 targets include equal pay for work of equal value, an end to forced labour, protection of labour rights and promotion of safe and secure working environments for all workers — including migrant workers and those in precarious employment. These are issues that I will write about in a later blog post.



An important element to providing employment for all is education, so it’s no surprise that this is a specific target of SDG 8: ‘By 2020, substantially reduce the proportion of youth not in employment, education or training’. And that leads us directly to SDG 4 ‘Quality education’ — which aims to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all. But how are we doing on employment and education in the EU?

Before the start of the economic crisis in 2008 employment in the EU had been rising steadily and peaked in 2008 at 70.3 %. However, in 2009 the crisis hit the European labour market. Between 2008 and 2013 the employment rate dropped by 1.9 percentage points. Fortunately, employment has been rising again since 2014 and in 2015 the EU came close to the pre-crisis employment level at 70.1 %.

The higher someone’s education level, the more likely they are to have a job. In 2015 more than 80 % of people with tertiary (such as university level) education and 71 % of those with at least upper secondary but not tertiary level had a job. In contrast, only 53 % of people with lower secondary education or below were employed.



Let’s take a closer look at the trends for tertiary education and lifelong learning. For tertiary level, the situation looks promising. The share of people between 30 and 34 who’ve completed a tertiary education has been growing steadily over the past decade, from 28.1 % in 2005 to 38.7 % in 2015.

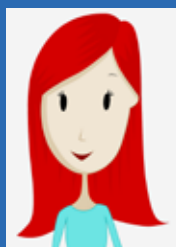
But nowadays it’s not enough to complete an education, as Judith has discovered. We need to keep our knowledge up to date too. For lifelong learning we see that the share of 25 to 64 year olds participating in education or training (in the last four weeks before the survey) has remained relatively stable at about 10 % over the past ten years.

It’s striking that education seems to draw greater numbers of women. Fewer girls than boys drop out of education and training early; more women than men complete tertiary education and participate in lifelong learning.

I’d conclude that the employment situation in the EU is not rosy. But I’m hopeful that better education — with more young people staying in education and gaining higher degrees — will help improve this situation.

3

Poverty, its three dimensions and its impact on health



Sustainable development: A blog from everyday life

#sustainabledevelopment #employment #environment
#SDGs #poverty #young #eurostat

Anne @SustainableAnne | October 10

I'll tell you about my family now. My father is a banker. We used to argue a lot about social and economic issues as well as the usual teenage concerns. But he's become more aware of environmental issues and even took on a new role as green investment officer at his bank. In any case, he's always been a caring father. I've never had to go hungry or face material obstacles. However, learning about statistics has helped me expand my perspective beyond my own privileged circumstances. And volunteering in a soup kitchen also allows me to directly help those in need.

Towards the end of our discussion on education and employment (covered in my last post), the soup kitchen rang to say that one of the volunteers was ill. So Cat stepped in to help. I was pleased to have her around a little longer.

During the walk to the soup kitchen, I explained how volunteering shifts in the kitchen were organised. I admit that I enjoyed the experience of instructing my former teacher!

As we began serving, I asked people about their day. We always offer friendly words and a warm environment as well as healthy meals, but sometimes it seems like just a drop in the bucket. I said this to Cat when we took a break.

Cat said poor families in her area increasingly used foodbanks and soup kitchens. As a teacher she's seen how food poverty affects life chances. Many pupils have difficulty concentrating in school because they're hungry, so she started a campaign to push for school breakfast schemes throughout the city. 'Perhaps that 'drop in the bucket' can turn into a wellspring when people work together for change,' she suggested.

I tried to keep that in mind as I served the remaining dinners and looked around the room. There's always a lot of coughing and sneezing. Many of the older people seem to suffer from arthritis, which must be worsened by cold and damp conditions.

So how do the SDGs confront such challenges? The ambitious aim of **SDG 1 'No poverty'** is nothing less than ending all forms of poverty and **SDG 3 'Good health and well-being'** aims to ensure healthy lives and promote well-being for everyone at all ages.

End poverty in all its forms everywhere

Goal 1 calls for an end to poverty in all its manifestations, including extreme poverty, over the next 15 years. All people everywhere, including the poorest and most vulnerable, should enjoy a basic standard of living and social protection benefits.

1 NO POVERTY



What does poverty mean in a European context? I've illustrated my thoughts in an infographic on Poverty & Health. It's not just a lack of money, it also means less access to essential resources. That's why we look at people who are at risk of poverty or social exclusion ⁽¹⁾. The trend of this indicator is similar to those in my previous entry on employment and education. Until the economic crisis, the numbers of people at risk fell steadily. However, from 2009 the count rose again and peaked in 2012, since then the number has been decreasing again. In 2015, 118.8 million people — 23.7 % of the EU population — were at risk of poverty or social exclusion, which is only 0.9 % higher than in 2010.

This indicator combines three dimensions of poverty: monetary poverty, material deprivation and low work intensity. Monetary poverty means that a person's income after social transfers (benefits provided by national or local governments) is less than 60 % of their country's median disposable income. So this is a relative measure based on comparing individual income in relation to middle-income earners in each country. In 2015, 86.7 million people in the EU were affected by monetary poverty (this equals 17.3 % of the population), also called 'risk of poverty after social transfers'.



Severe material deprivation, in contrast to monetary poverty, is an absolute measure. People are considered severely materially deprived when they cannot afford at least four of nine defined items ⁽²⁾. These include balanced meals, a telephone or being able keep a home adequately warm. In the EU 40.3 million people (8.1 % of population) were affected by this dimension of poverty in 2015.

The third dimension concerns how much work people have done during a year compared with how much they could have worked. If the adult members of a household worked less

⁽¹⁾ See <https://www.youtube.com/watch?v=jykeoHu1iRA>

⁽²⁾ Full list of items: 1) (arrear on) mortgage or rent payments, utility bills, hire purchase instalments or other loan payments; 2) one week's annual holiday away from home; 3) a meal with meat, chicken, fish (or vegetarian equivalent) every second day; 4) unexpected financial expenses; 5) a telephone (including mobile phone); 6) a colour TV; 7) a washing machine; 8) a car and 9) heating to keep the home adequately warm.



Poverty & Health



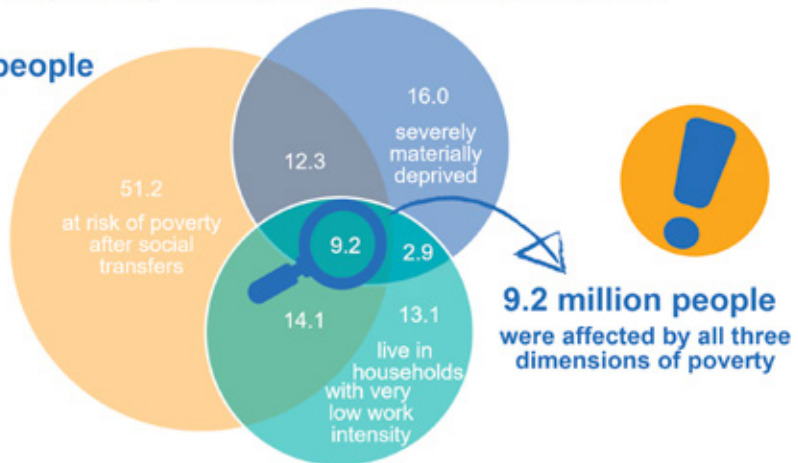
People at risk of poverty or social exclusion, EU-28, 2015 (million people)

118.8 million people

were affected by
at least one
dimension of
poverty

this equates to

23.7 %
of the EU
population



9.2 million people
were affected by all three
dimensions of poverty

Context

31.2 %

of young people (18–24) and 26.9 % of children (younger than 18) were at risk of poverty in 2015 — the risk for people aged 65 or over was 17.4 %

47.7 %

of single parents were at risk of poverty or social exclusion — double of the average risk and higher than for any other household type in 2015

40.3 %

of adults born outside the EU-28 were at risk of poverty or social exclusion in 2015 — only 21.7 % of the native citizens faced this risk

65.5 %

of children of low-educated parents were at risk of poverty in 2015 — their risk was six times higher than for children of high-educated parents

Poverty affects health

The poorest 20 % of the EU population are

3 times

more likely to feel in
'bad' or 'very bad'
health



&

10 times

more likely to report
unmet medical
needs due to
monetary reasons



than the richest 20 %

Source: Eurostat (online data codes: tsdsc100, tsdsc270, tsdsc310, tsdsc280, ilc_pees01, ilc_peps02, ilc_peps03, ilc_peps04, ilc_peps06, ilc_peps60, hlth_silc_10, tsdph270 and ilc_pw02)

than 20 % of their working capacities during the past year, all members of this household are regarded as living in a household with very low work intensity. In 2015, this has been the case for 39.3 million people or 10.5 % of the population younger than 60 in the EU.

People are counted only once for the 'risk of poverty or social exclusion' headline indicator, even if they are affected by more than one poverty dimension. In 2015, more than 40 % of people affected by monetary poverty also faced material deprivation and/or low work intensity. The most indigent people are affected by all three dimensions of poverty or social exclusion at the same time. In the EU, 9.2 million were affected by all three dimensions at once in 2015.

As I mentioned, poverty is not only about money. My sociology professor says it's simplistic — even crude — to see the experience of poverty as only monetary. Being at risk of poverty and social exclusion does not only affect a person's economic situation. It may also affect self-esteem, relationships with other people and health.

Ensure healthy lives and promote well-being for all at all ages

3 GOOD HEALTH AND WELL-BEING

Goal 3 aims to ensure health and well-being for all at all ages by improving reproductive, maternal and child health; ending the epidemics of major communicable diseases; reducing non-communicable and environmental diseases; achieving universal health coverage; and ensuring access to safe, affordable and effective medicines and vaccines for all.



People in difficult economic circumstances feel in poorer health and have less access to health services. When the highest income quintile (20 % of the population with the highest income) is compared to the lowest income quintile, we find for 2014 that the lowest income quintile was three times likelier to perceive their state of health as 'bad' or 'very bad' than the highest income quintile. In addition, the likelihood of reporting unmet needs for medical care due to monetary reasons was 10 times higher for the lowest income quintile than for the highest. People with low income are also more likely to have a worse overall life satisfaction. In 2013 the lowest income quintile rated their life satisfaction as 18 % worse than those in the highest income quintile. This difference was most evident in Bulgaria, where the poorest were 44 % less satisfied with life compared to the richest.



Who's most at risk? It's no surprise that unemployed people are at risk of poverty or social exclusion. In my post about employment and education, I showed that the unemployment rate for 15 to 24 year old people is twice as high as the average unemployment rate and early leavers face poor job prospects. Those between 18 and 24 are at the highest risk of poverty or social exclusion among all age groups. Also at high risk are people with low educational levels. It's worrying that factors leading to poverty or social exclusion (education level, ability to make

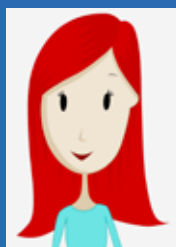
ends meet and joblessness) continue from one generation to the next ⁽³⁾. And migrants from non-EU countries face on average nearly twice as high a risk of poverty or social exclusion (40.3 % in 2015) than people born in their country of residence (21.7 % in 2015). For people moving to another country within the EU the average risk is slightly higher (25.1 % in 2015).

To sum up, there is a strong link between health and poverty. Therefore, if poverty can be reduced the health situation of those affected may improve as well.

⁽³⁾ Eurostat (2016), *Intergenerational transmission of disadvantage statistics*.

4

Inequalities between and within countries



Sustainable development: A blog from everyday life

#sustainabledevelopment #employment #environment
#SDGs #poverty #young #eurostat

Anne @SustainableAnne | October 17

I mentioned my Greek friend Sophia in an earlier blog post. Well, she invited me and Mark for dinner at her place. She also said that Judith would also be dropping by with a 'surprise guest', which intrigued me.

We had a 40-minute walk from the nearest train station to get there. It was a nice autumn evening, so we were happy to enjoy a stroll. As we went from my 'edgy' but comfortable part of town to Sophia's neighbourhood the contrast struck me. Buildings were in bad repair, there was rubbish on the street and little in the way of shops or amenities. I recognised the reek of several kinds of pollution.

I was talking about this with Mark when a pale and tired-looking woman approached us. 'Hi there, how you doing?' She reached out to clasp my hand but I pulled away, not comfortable with a stranger being so familiar.

'Sorry, I don't think we've met,' I said.

'Oh yes we have! You just don't want to know me unless I'm holding my plate out.' She stalked off, clearly offended. Then I realised that she came regularly to the soup kitchen.



‘Maybe you should look up more when you’re serving out the dinners,’ Mark suggested.

I was shaken by this encounter, but it inspired me to think more about inequalities in our society. **SDG 10 ‘Reduced inequalities’** is about lessening inequality within and among countries. It is linked with **SDG 11 ‘Sustainable cities and communities’**, which strives to make cities and human settlements inclusive, safe, resilient and sustainable.

Reduce inequality within and among countries

10 REDUCED INEQUALITIES



Goal 10 calls for reducing inequalities in income, as well as those based on sex, age, disability, race, class, ethnicity, religion and opportunity—both within and among countries. It also aims to ensure safe, orderly and regular migration and addresses issues related to representation of developing countries in global decision-making and development assistance.

It may be no surprise that income is not distributed evenly within the EU. In fact, the richest 20 % of the population earn about five times more than the poorest 20 %. In 2015 the richest quintile earned 38.8 % of the total income in the EU, while the poorest only earned 7.7 %. This situation hasn’t changed much over the past six years.

There are other forms of inequality besides those related to individual income, such as inequalities between countries. One way to measure these is to look at the gross domestic product (GDP), which calculates the amount of goods and services produced by an economy. It is also often used as a marker for economic health. However, comparisons based on GDP per capita are tricky due to different currencies and pricing levels between countries. PPS, which stands for ‘purchasing power standards’, is an artificial currency unit adjusted by currency and pricing level differences. In theory, one PPS can buy the same amount of goods and services in each country. In 2015 the EU-28 average of GDP per capita was 28 800 PPS.

Make cities and human settlements inclusive, safe, resilient and sustainable

11 SUSTAINABLE CITIES AND COMMUNITIES



Goal 11 aims to renew and plan cities and other human settlements in a way that fosters community cohesion and personal security while stimulating innovation and employment.

There’s great variation among different EU Member States in how GDP per capita is distributed. In 2015 Luxembourg had by far the highest GDP per capita among Member States, with 76 400 PPS, which was 2.7 times above the EU average. This is partly because many cross-border workers contribute to Luxembourg’s GDP but are not part of its resident population. Bulgaria had the lowest GDP per capita of 13 600 PPS, which is less than half of the EU average.

As I’ve said, inequalities do not only exist between Member States but also within them. In 2014 the biggest difference between regions existed in the United Kingdom. ‘West Wales and



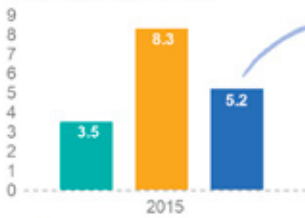
Inequalities



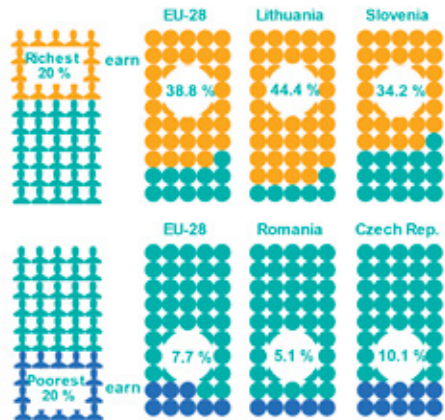
Inequality of income distribution in 2015

The richest 20 % of the population earned five times more than the poorest 20 %

Romania had the widest gap, Czech Republic and Slovakia the smallest gap in the EU



■ Czech Republic and Slovakia
■ Romania ■ EU-28



Context

Access to public transport



The likeliness to report 'very high' difficulties in accessing public transport depends on the degree of urbanisation:



Access to medical examination by degree of urbanisation, EU-28, 2014



Source: Eurostat (online data codes: tsdsc260, ilc_di01, nama_10r_2gdp, nama_10_pc, ilc_hcmp06 and hlth_silc_21)

the Valleys' had the lowest GDP per capita of 18 900 PPS, while the region with the highest GDP per capita, 'Inner London — West', had nearly eight times more with an amount of 148 000 PPS. The country with the lowest difference between its regions was Finland, where the regions with the highest and the lowest GDP are just 1.6 times apart. For my analyses I excluded countries with just one or two regions because the ratio there would not give a meaningful indication about inequalities in these countries.

Access to public transport is another facet of inequality among EU Member States. We experienced this directly when we made our journey to Sophia's neighbourhood. When we checked the map for metro or bus connections we found that we couldn't go directly to her place by public transport without that 40-minute walk. A viable public transport system allows people to commute and travel. Therefore, it can expand labour markets, offer more opportunities and improve our quality of life. It is a crucial part of the solution to environmental challenges faced by cities.



On average, 79.6 % of the EU population reported 'low' or 'very low' levels of difficulty in accessing public transport, and only 5.7 % reported 'very high' in 2012. Finland and Ireland had the highest shares of population reporting very high difficulty levels, at 14.8 % and 11.9 %, respectively. In contrast the countries with the lowest share of people reporting very high difficulty in accessing public transport were Spain at 2.2 % and Hungary as well as Slovakia at 2.3 %.

It's not surprising that in nearly all countries, people living in rural areas are more likely to report that they experience 'very high' difficulty in accessing public transport than those living in cities or towns. Therefore, having access to public transport is not so much about living in the 'right' country but more about living in cities or in the countryside. At EU level only 2.3 % of the population living in cities reported a 'very high' level of difficulty in accessing public transport. People residing in towns and suburbs reported 5.6 %, while those based in rural areas faced the most obstacles as 11.9 % reported very high difficulties.



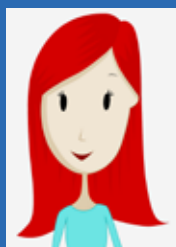
In my last post about poverty and health I learned that poor people are ten times more likely to have unmet needs for medical care due to monetary reasons than rich people. I also wondered if the variation in unmet medical needs depends on the degree of urbanisation. Looking at the data, it turned out that differences are quite small: in 2014, 93.3 % of people living in cities reported no unmet medical needs. In towns and suburbs the share was slightly higher with 93.5 %, while it was somewhat lower for people living in rural areas, with 92.7 %. Aside from the cost aspect, people in rural areas reported more often that they would have to travel too far for medical treatment or that they would hope to recover without treatment.

After writing this entry, I realise that inequalities can be found just around the corner as well as 'over there'. They are not only about money and economy but touch on many other facets of life. Who knows — it's possible that these 'facets' could be a cause of income and economic inequalities and not only their result.

So I'll repeat what my sociology professor said: it is simplistic to focus only on income issues. The world is far more complicated...

5

More sustainable use of energy?



Sustainable development: A blog from everyday life

#sustainabledevelopment #employment #environment
#SDGs #poverty #young #eurostat

Anne @SustainableAnne | October 23

In my last entry Mark and I were on our way to Sophia's place, if you recall. So we eventually arrived and we were relaxing around the table, looking forward to some tasty Greek food. Then the doorbell rang and in came Judith with her mystery guest. It was Maria, a Brazilian woman who had challenged and ultimately inspired me during my presentation on sustainable development indicators back in 2012.

What a surprise! Maria said she was in town to promote her first novel at an international science fiction convention, which is where she met Judith. Maria added that she also had a 'day job' at a community-based solar energy project in the favelas of Rio, since few people can live entirely from writing. And soon we were all chatting over dinner and a bottle of Brazilian wine.

Suddenly the lights went off and the music stopped. In the tense silence that followed, Sophia checked the fuse box but found everything in order. She returned with some candles and explained they were part of her 'apocalypse survival kit', since she experienced a power cut in 2014 when electricity workers went on strike.

I tend to think that energy is available all time, and avoid thinking about what would happen if we faced a serious energy shortage. That's why **SDG 7 'Affordable and clean energy'** is so relevant. It's not only concerned with ensuring access to affordable and reliable energy for all but also about using renewable and clean energy sources. So we were fascinated by Maria's account of how her organisation worked to bring renewable energy to the poorest neighbourhoods. She also hoped to visit community-based energy projects in Europe and asked if we had any recommendations.

In contrast to fossil energy sources that needed millions of years to accumulate but are being used up in only a few generations, renewable energy sources tap into constant energy flows such as sunlight or the flow of air or water. Other renewable energy sources, such as biomass, can be replenished within a reasonable timeframe. Many of these emit little or no greenhouse gases during production or use, such as solar, wind or hydro ⁽¹⁾. However, the picture is not that straightforward, especially with bioenergy. Burning of biomass such as wood, straw or other plant material emits as much or more greenhouse gas as fossil fuels, so its benefits cannot be taken for granted ⁽²⁾.

Ensure access to affordable, reliable, sustainable and modern energy for all

7 AFFORDABLE AND CLEAN ENERGY

Goal 7 seeks to promote broader energy access and increased use of renewable energy, including through enhanced international cooperation and expanded infrastructure and technology for clean energy.



The EU has progressed in this area, with the share of renewable energy in gross final energy consumption rising from 9 % in 2005 to 16 % in 2014. What's more, all Member States increased their renewable energy share during that period. From the 14 countries that were below the EU-28 average in 2014, 11 have more than doubled their share since 2005. Aside from promoting and developing renewable energy sources, encouraging economical use of energy is another way to make affordable and reliable energy accessible for all.

First, we have to be aware that energy consumption is not fixed. Since 2005 total consumption has been falling. Energy use is often measured in million tonnes of oil equivalent (Mtoe). One tonne of oil equivalent (toe) is equivalent to about 42 GJ (gigajoules), and an average EU citizen uses little more than 3 toe of energy a year. In the EU gross inland energy consumption fell from 1 831 Mtoe in 2005 to 1 606 Mtoe in 2014, this equals a drop of 12 %. At first glance this looks like a promising sign that energy is being used more efficiently in the EU. But aside from energy efficiency policies, this drop can also be attributed to reduced economic output and mild winters that resulted in less energy needed for heating ⁽³⁾.



So it's useful to look into the relationship between energy consumption and economic output. This is called energy productivity and measures the value of economic output produced per unit of energy used. The energy productivity of the EU Member States rose from EUR 6.7 per kilogram (kg) of oil equivalent in 2005 to EUR 8.2 per kg of oil equivalent in

⁽¹⁾ It still takes some fossil energy to build the capacities for renewable energy use and maintain their operations (for example, to produce the steel to build the windmill), but that is relatively minor compared to the energy produced.

⁽²⁾ When biomass comes from the right source, its emissions in use are compensated by gains elsewhere. For example, if the biomass is a waste or residue that would be burnt anyway just to get rid of it, using it for energy avoids the emissions from disposal, making the overall impact very little or even less than zero (i.e. more emissions are avoided than caused by using the biomass).

⁽³⁾ European Environment Agency (2015), *Trends and Projections in Europe 2015 — Tracking progress towards Europe's climate and energy targets*.



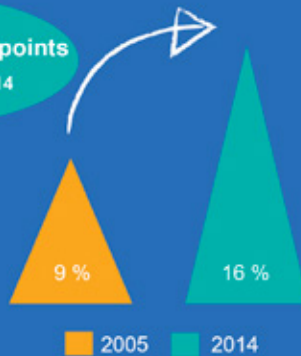
Energy



Share of renewable energy in gross final energy consumption EU-28, 2005 and 2014

Grew by 7 percentage points between 2005 and 2014

All Member States increased their renewable energy consumption



This increase was driven by support schemes for renewable energy technology and falling renewable energy system costs

Context

Energy productivity

...increased by **22 %** from 2005 to 2014 in the EU

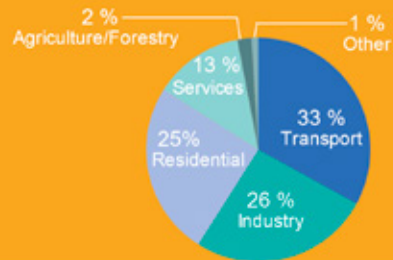


Energy consumption



...fell by **12 %** from 2005 to 2014 in the EU

Energy consumption by sector, EU-28, 2014



All sectors reduced their energy consumption between 2005 and 2014



Source: Eurostat (online data codes: t2020_31, tsdcc320, t2020_rd310, tsdpc320 and ilc_mdse01)

2014, which equals a gain of 22 %. This improvement can also be interpreted as meaning that less energy is needed to produce one unit of economic output, which suggests that energy is now being used more efficiently in the EU.

However, it's not enough to look into renewables, energy consumption and energy productivity. A critical question is whether all people have sufficient access to energy. The (self-reported) inability to keep one's home adequately warm can be seen as an indicator of 'fuel poverty', which means lack of access to fuel supply due to factors such as low household income, high energy costs and low energy efficiency. In 2015, 9.4 % of the EU population was affected by fuel poverty.

When I investigated poverty earlier I learned that 86.7 million people in the EU were affected by monetary poverty in 2015, with 22.8 % of them also affected by fuel poverty. I also discovered that single-parent households are most at risk of poverty and social exclusion among all household types. This is also true when it comes to fuel poverty. In 2015, 14.5 % of single-parent households were affected by fuel poverty, again more than any other household type. Geographically, fuel poverty is severe in many eastern, southern and central European countries. Within the EU, Bulgaria had the greatest number of people not able to warm their homes adequately (39.2 %), followed by Lithuania (31.1 %) and Greece (29.2 %).

While keeping this challenge in mind, the rising share of renewable energy use as well as improved energy productivity makes me think we're on a good path towards affordable and clean energy.

As we were talking about this over our candle-lit dinner, the lights came back on.

6

How well do we treat nature?



Sustainable development: A blog from everyday life

#sustainabledevelopment #employment #environment
#SDGs #poverty #young #eurostat

Anne @SustainableAnne | October 30

My grandpa Robert is a ranger at the national park and a dedicated 'ecowarrior'. He was holding a small remembrance for my mother — his daughter — at the tree he planted when she was born. She died from a severe asthma attack when I was seven. I've come to realise that much of my passion for the environment comes from this experience, since the rise in asthma has a major environmental component. A lot of what I do is dedicated to her memory. I want to help prevent further loss of life and contribute to creating a better future for all. This is much more important to me than making lots of money.

End hunger, achieve food security and improved nutrition and promote sustainable agriculture

2 ZERO HUNGER

Goal 2 seeks to end hunger and all forms of malnutrition and to achieve sustainable food production by 2030. It is premised on the idea that everyone should have access to sufficient nutritious food, which will require widespread promotion of sustainable agriculture, a doubling of agricultural productivity, increased investments and properly functioning food markets.



I went there a day earlier to help with the preparations and spend some time alone with Grandpa. We took a long walk and talked about many things — family matters, my scholarship, his somewhat obsessive interest in obscure bands. But soon our conversation

came to our mutual concern: the importance of protecting natural resources and how this can be balanced along with the need to produce food and build housing.

I don't think anyone will argue about the importance of pursuing **SDG 2 'Zero hunger'**, which means an end to hunger, achieving food security and improved nutrition and promoting sustainable agriculture. However, if we don't take steps to preserve intact ecosystems on land and water, we won't survive in the long term anyway. So we come to two crucial sustainable development goals. **SDG 14 'Life below water'** aims to conserve and thoughtfully use the oceans, seas and marine resources for sustainable development. And **SDG 15 'Life on land'** strives to protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, stop and reverse land degradation and halt biodiversity loss.

Conserve and sustainably use the oceans, seas and marine resources for sustainable development

14 LIFE BELOW WATER



Goal 14 seeks to promote the conservation and sustainable use of marine and coastal ecosystems, prevent marine pollution and increase the economic benefits to small island developing states and least developed countries (LDCs) from the sustainable use of marine resources.

Healthy ecosystems provide food, water and fuel and regulate the environment through services such as carbon storage, flood control and water purification. To gauge the healthiness of an ecosystem, we look at biodiversity. The common bird index, which integrates the population abundance and diversity of a selection of common bird species associated with specific habitats, is considered a good indicator of overall biodiversity. Birds quickly reflect environmental change in ecosystems because they are near the top of the food chain. Since bird populations fluctuate from year to year due to interactions with other species and environmental factors such as food supply and climatic conditions, we need to look at the long-term trend.

Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss

15 LIFE ON LAND



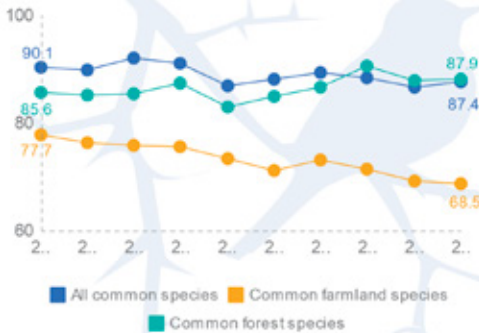
Goal 15 focuses on managing forests sustainably, restoring degraded lands and successfully combating desertification, reducing degraded natural habitats and ending biodiversity loss.

I will analyse three indices: the index of all common birds, which includes 167 bird species and two subgroups of more specialised birds, common farmland birds and common forest birds. Between 1990 and 2014 the index for all common birds in the EU fell by 12.6 % to 87.4 %. The common forest bird population fell by 12.1 % over the same period and is slightly above the

Nature conservation

Common bird index, EU, 2005-2014

Index 1990 = 100



The 'all common birds' population has been fairly stable in the EU since 2005, over the long term it has shrunk significantly by 12.6 % between 1990 and 2014

The sub-index 'common forest species' reached a low of 79.2 % in 2000, since then it has improved considerably by 8.7 percentage points

The sub-index 'common farmland species', already worryingly low in 2005 at 77.7 %, declined again severely by another 9.2 percentage points between 2005 and 2014

Why do we look at birds?



Birds quickly reflect environmental change in ecosystems and therefore are a good indicator of biodiversity

Context

Terrestrial areas



Artificial land cover seals soil and fragments ecosystems which harms biodiversity

4.1 % of land area in the EU-27 was covered by artificial areas in 2012

Marine areas



5 112 555 tonnes of fish were caught by EU Member States fleets in 2015

In comparison Norway caught 2 146 074 tonnes

Overfishing harms the health and productivity of marine ecosystems and the food security of millions of people



92 % sufficiency of terrestrial areas proposed by EU Member States in 2013 for nature conservation



Areas protected for the preservation of biodiversity are proposed by EU Member States. The sufficiency index measures the degree to which Member States have proposed sites that are considered sufficient to protect the habitats and species mentioned in the Habitats Directive



55 % sufficiency of marine areas proposed by EU Member States in 2013 for nature conservation

Source: Eurostat (online data codes: tsdnr100, fish_ca_main, env_bio1 and tsdnr510)



index for all common birds. In contrast, the common farmland bird population experienced a dramatic plunge of 31.5 %, falling to 68.5 % in 2014. Much of this decline has been attributed to changes in agricultural methods, intensification and specialisation ⁽¹⁾ such as hedgerow loss, land drainage, increased fertiliser and pesticide use and loss of farm diversity ⁽²⁾.

Grandpa showed me a public allotment where local people learned about organic cultivation methods. So we discussed how organic farming can help to protect farmland biodiversity. It is a method of production that prohibits or restricts the use of chemical-synthetic pesticides, chemical fertilisers, growth hormones, antibiotics and genetic modifications. This leads to enhanced soil health, natural fertility and reduces energy and water inputs, although it is often less productive than conventional agricultural practices. Organic farming also creates jobs in rural communities and meets the growing consumer demand for natural and healthy products ⁽³⁾. The share of total agricultural area under organic cultivation in the EU rose from 3.6 % in 2005 to 6.2 % in 2015 ⁽⁴⁾, when about 11 million hectares were fully organically farmed, or areas in the process of conversion.

The gross nutrient balance provides insights into agricultural sustainability. The amounts of nitrogen and phosphorus added to an agricultural system, in particular through animal manure and mineral fertilisers, are balanced against the harvested biomass. In areas of intensive meat production, surpluses of manure often lead to surpluses of nitrogen in the landscape with nutrient leaching resulting in surface water and groundwater pollution and eutrophication ⁽⁵⁾. At the same time, deficits of phosphorus can indicate loss of soil fertility from soil degradation and erosion. In the EU the nutrient balance is disturbed, mostly because of the surplus of nitrogen, which declined slightly between 2005 and 2013. Since 2010 it is stabilising around 51 kilograms (kg) per hectare. The phosphorus surplus was considerably lower and fell from 4 kg per hectare in 2005 to 1 kg per hectare in 2009 and settled at 2 kg per hectare since 2010.

We walked through rolling pastureland where cows were grazing. I used to think this was an idyllic scene, but now that I've investigated I'm not so sure! For a more detailed picture of how livestock farming affects the environment we can examine the livestock



⁽¹⁾ Donald, P. F., Green, R. E. and Heath, M. F. (2001), *Agricultural intensification and the collapse of Europe's farmland bird populations*, Proc. Roy. Soc. Lond. B 268, pp. 25–29.

⁽²⁾ European Environment Agency (2015), *State of nature in the EU. Results from reporting under the nature directives 2007–2012*, Technical report No 02/2015, Copenhagen.

⁽³⁾ See http://ec.europa.eu/agriculture/organic/organic-farming/what-is-organic-farming_en; Pimentel, D., Hepperly, P., Hanson, J., Seidel, R. and Douds, D. (2005), *Organic and Conventional Farming Systems*, Environmental and Economic Issues, pp. 26–27; European Commission (2016), *Agriculture and Rural Development – Organic Farming*.

⁽⁴⁾ 2005 data refer to EU-27, 2015 data to EU-28.

⁽⁵⁾ A kind of pollution that occurs when a water body becomes over-rich in plant nutrients. As a result it becomes overgrown with algae and other aquatic plants. When the plants die and decompose they rob the water of oxygen and the water body becomes lifeless.

Agriculture

Area under organic farming, EU, 2005 and 2014



Context

Gross nutrient balance	Livestock density
<p style="text-align: center;">Nutrient levels are out of balance in the EU</p> <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p>There was a 51 kg per hectare surplus of nitrogen in 2013</p> </div> <div style="width: 45%;"> <p>Nitrogen surpluses can cause... ...nutrient leaching ...surface water and groundwater pollution ...eutrophication</p> </div> </div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div style="width: 45%;"> <p>...and a 2 kg per hectare surplus of phosphorus in 2013</p> </div> <div style="width: 45%;"> <p>Phosphorus deficits can indicate... ...loss of soil fertility through soil degradation and erosion</p> </div> </div>	<p style="text-align: center;">Livestock density</p> <div style="display: flex; justify-content: space-between; align-items: flex-start;"> <div style="width: 45%;"> <p>Livestock density is indicative of the intensiveness of meat production</p> <p>Associated detrimental environmental impacts of meat production include... ...high greenhouse gas emissions ...nutrient surpluses and eutrophication ...spread of antibiotic-resistant microbes ...animal welfare issues</p> </div> <div style="width: 45%;"> <p>The majority of Member States had livestock densities below 1.6 LSU/ha in 2013... ...only Belgium (2.7 LSU/ha) Malta (3.2 LSU/ha) and the Netherlands (3.6 LSU/ha) had higher densities in 2013</p> </div> </div> <div style="margin-top: 10px; border: 1px solid black; padding: 5px;"> <p>The livestock density index provides the number of livestock units (LSU) per hectare of utilised agricultural area</p> </div>

Source: Eurostat (online data codes: tsdpc440, org_cropar_h1, tsdpc450 and t2020_rn310)

density index. This index provides the number of livestock units (LSU) per hectare of utilised agricultural area. The LSU is a reference unit that aids the aggregation of livestock of different species and ages. Livestock density indicates the intensiveness of meat production. Intensive meat production is associated with damaging environmental impacts such as high greenhouse gas emissions, nutrient surpluses and eutrophication, the spread of antibiotic-resistant microbes and animal welfare issues. It also depends on imported feed shipped over long distances, which is often produced with synthetic fertilisers and plant protection chemicals that negatively affect biodiversity, water quality and soil health. Feed production is also a major cause of deforestation.

In the EU, the livestock density index varies widely between Member States. In 2013 most countries reported livestock densities below 1.6 LSU/ha. Only Belgium (2.7 LSU/ha), Malta (3.2 LSU/ha) and the Netherlands (3.6 LSU/ha) were above. The highest livestock densities are found in the smaller Member States, but not all small Member States have high livestock densities. For example, Slovakia and Estonia are among those with the lowest livestock densities.



Natural habitats are not only changed for agricultural purposes but are also turned into built-up areas (buildings and greenhouses) and artificial non-built-up areas (car parks, roads and railways). This 'artificial land cover' leads to the sealing of soils and large-scale ecosystem fragmentation. Artificial areas typically have a lower value for biodiversity. The share of artificial land cover on average comprised 4.1 % of land area in the EU-27 in 2012. Malta stands out from other Member States with a higher share of artificial land cover (32.6 %). All other EU Member States have shares of artificial land cover below 13 %. In all EU Member States except Malta, artificial non-built-up areas make up more of the artificial land cover than built-up areas.

Areas protected to preserve biodiversity are proposed by the EU Member States under the Habitats Directive ⁽⁶⁾. The sufficiency index measures the degree to which Member States have proposed sites that are considered sufficient to protect the habitats and species mentioned in the Habitats Directive. In protected areas created under the Habitats Directive, development and activities that pose a threat to protected species or ecosystems are limited in order to support sustainable use of ecosystems and prevent biodiversity loss. The average sufficiency index rating in 2013 was 92 % for terrestrial areas and 55 % for marine areas.

In relation to protecting marine habitats, I want to address overfishing. It not only affects the health and productivity of marine ecosystems but also the food security of millions of people who rely on fish as an essential source of protein. The indicator total fish catches from major fishing areas is not directly related to sustainable fishing, but provides a picture of the amount and origin of fishing yields in the EU and its Member States which contribute to the availability of food supplies. In 2015, about 5.1 million tonnes of fish were caught by EU Member State fleets. In comparison, Norway had the highest catch of the European Free Trade Association (EFTA), with about 2.1 million tonnes.

In a nutshell, preserving the environment and using natural resources are not opposing aims if we use our resources sustainably and protect our environment as well.

⁽⁶⁾ European Commission (2016), *Environment — The Habitats Directive*.

7

How efficiently do we use our natural resources?



Sustainable development: A blog from everyday life

#sustainabledevelopment #employment #environment
#SDGs #poverty #young #eurostat

Anne @SustainableAnne | November 7

Every time Grandpa Robert and my father meet, sooner or later they start to argue. This happened after the gathering for my mother two weeks ago. Grandpa Robert castigated my father and other bankers for only looking at profits and not caring about the damage done to the environment. I think Grandpa really blames these priorities for the death of my mother. Even when Dad began working in the sustainable investment division of his bank, Grandpa called it 'greenwashing' that didn't get to the heart of the problem.

This time, they argued whether economic growth is good or bad. My father insisted that growth is needed to ensure employment and to reduce poverty. In contrast Grandpa Robert claimed continued growth is not possible in a finite world. Listening to this discussion made me think about economic growth and resource use.

Ensure sustainable consumption and production patterns

Goal 12 aims to promote sustainable consumption and production patterns through measures such as specific policies and international agreements on the management of materials that are toxic to the environment.

12 RESPONSIBLE
CONSUMPTION
AND PRODUCTION



I investigated **SDG 12 'Responsible consumption and production'**, which is about making sure our consumption and production patterns are sustainable. I also looked again into **SDG 11 'Sustainable cities and communities'**. This time I focused on municipal waste treatment because this is also related to resource use.

Make cities and human settlements inclusive, safe, resilient and sustainable

11 SUSTAINABLE CITIES AND COMMUNITIES

Goal 11 aims to renew and plan cities and other human settlements in a way that fosters community cohesion and personal security while stimulating innovation and employment.



An important measure for resource use is the 'domestic material consumption' (DMC) indicator, which refers to the overall amount of materials directly used within an economy. The average domestic material consumption in the EU Member States fell from 7 858 million tonnes in 2005 to 6 708 million tonnes in 2015, which reflects a reduction of 14.6 %. To make it more concrete, in theory every EU citizen consumed 15.9 tonnes of material in 2005 and 13.2 tonnes in 2015.

Sustainable consumption and production aims at 'making more from less'. By 'more', we usually mean economic growth or GDP. And 'less' refers to resources and environmental degradation. This is what is usually described as 'decoupling'. Resource productivity refers to this relation between economic output (GDP) and resources used in the production process (DMC). The EU's resource productivity in 2015 was at EUR 2.00 per kilogram (kg), which was 28 % higher than the value in 2005 of EUR 1.56 per kg. At first glance this might indicate a decoupling of GDP and material consumption. And indeed, the gain in resource productivity was mainly driven by the drop in DMC (– 20 % from 2007 to 2013), which was much more than the drop in GDP during the economic downturn. However, it is very likely that the economic crisis influenced the plunge in DMC, especially when DMC has been rising again (slowly) since



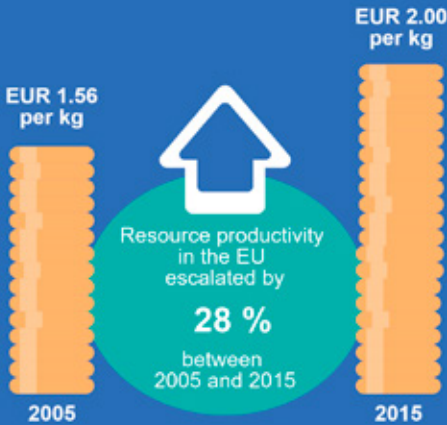


Resource use



Resource productivity, EU-28, 2005 and 2015

EUR per kg chain linked volumes



Economic growth is usually associated with increased material and energy use

Decoupling means to stabilise or decrease resource use while the economic driving force is growing

The rise in resource productivity between 2005 and 2015 is more likely related to the economic crisis than to decoupling



Resource productivity is calculated by dividing GDP by domestic material consumption

Context

Domestic material consumption

Material consumption per capita in the EU

fell from **15.9 tonnes** in 2005 to **13.2 tonnes** in 2015

In 2015 the average EU inhabitant consumed



Waste management

The average amount of waste generated by each EU inhabitant fell from



The recycling rate of municipal waste (including composting and anaerobic digestion) in the EU improved from 34.9 % in 2007 to 43.5 % in 2014

Source: Eurostat (online data codes: tsdpc230, tsdpc100, t2020_rt120 and tsdpc210)

2014. It is therefore too early to conclude that a decoupling between economic growth and resource use has actually taken place.

Waste represents a loss of resources in the form of materials and energy. Waste can be reduced by changing to less material-intensive production and consumption patterns that allow natural resources to be used more efficiently. The volume of materials or products that enter the waste stream before recycling, composting, landfilling or combustion can be referred to as waste generation. In the long term, the amount of waste (excluding major mineral wastes) generated for each inhabitant in the EU-28 declined from 1 907 kg in 2004 to 1 806 kg in 2014. The amount dropped between 2004 and 2010 by 7.1 %. This was most likely affected by the slowdown in economic activity during the crisis. However, the decline was reversed in 2012. In 2014 the amount of waste generated was 2.0 % higher than in 2010. Major mineral wastes are excluded from these statistics because of the strong fluctuations in waste generation in the mining and construction sector. This way the indicator reflects the general trend in waste generation better.

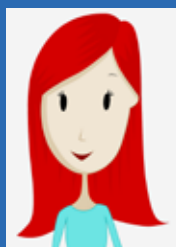
Of course it would be best to avoid generating waste at all. At the same time, there are still responsible ways to handle it. Recycling methods include material recycling, composting and anaerobic digestion. In addition to cutting the amount of waste entering landfills, higher levels of recycling can also create employment. Municipal waste consists mainly of waste generated by households, but may also include similar wastes generated by small firms and public institutions and collected by the municipality. The recycling rate refers to the amount of recycled waste divided by the total waste accrued in a municipality. In the EU, 34.9 % of the municipal waste was recycled in 2007. This rate had improved to 43.5 % by 2014.

So it seems the EU has moved towards more sustainable resource use over the past few years. However, we still have to see if all these developments are truly sustainable or if they merely reflect the short-term impact of the economic crisis.

Dad and Grandpa did not come to any conclusions, though we agreed we all can contribute by using resources responsibly. Since he began working in green investment, Dad might sometimes agree with Grandpa.

8

Good governance and security in Europe?



Sustainable development: A blog from everyday life

#sustainabledevelopment #employment #environment
#SDGs #poverty #young #eurostat

Anne @SustainableAnne | November 16

Last Friday I went to a concert with Grandpa Robert to see one of his favourite bands, a British reggae group from the 1980s that had reunited. Mark joined us when he found out that a 'ska-punk' band from south-eastern Europe was sharing the bill — one of his favourites.

I was nervous about Mark and Grandpa meeting for the first time, but they got on well. Perhaps too well, especially when Mark said he just loved psychedelic bands of the 1970s. I even started to feel a little left out while the guys got deep into their music-geekery. But then we ran into more friends and I enjoyed introducing them to Grandpa.

However, any musical differences paled in significance when I checked my phone on the way home with Mark. Zoe had rung several times. Could something be wrong?

I rang her back and she told me about the attacks in Paris just a few hours ago. Gunmen and suicide bombers hit a concert hall, a major stadium, restaurants and bars and left people dead and hundreds wounded. I was stunned. All these people were only enjoying themselves, just like the three of us.

Until now I was not so sure how to approach **SDG 16 'Peace, justice and strong institutions'**. It's too easy to take stability for granted in the EU. SDG 16 aims to promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels. So where do we stand?

Trust in institutions and government is an important factor for sustainable development. The level of trust a society has in its institutions can be seen as a measure of a state's stability, functionality and efficacy. In 2013, inhabitants of the EU Member States had the highest confidence in the police with a rating of 5.9 out of 10 possible points. This was followed

by the legal system, which showed an average trust rate of 4.6 out of 10, while the poorest performance in institutional confidence could be found for the political system (3.5 out of 10 points). There seems to be a link between education and trust in institutions. People with at most lower secondary education rated all institutions lower than people with upper secondary or tertiary education levels. The differences were less for trust in the police (0.5 points) than for trust in the legal and political system (1.3 points).

Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels

Goal 16 envisages peaceful and inclusive societies based on respect for human rights, the rule of law, good governance at all levels, and transparent, effective and accountable institutions.

16 PEACE AND JUSTICE
STRONG INSTITUTIONS



Confidence in political institutions is important for effective democracies. People who trust the political system are more likely to vote in democratic elections, while politicians and political parties are only in a position to make decisions that are accepted in society when they are trusted. Voter turnout is a major indicator of the degree of citizen participation in public affairs. In the EU, voter turnout in national parliamentary elections fell between 2005 and 2012, from 71 % to 68 %, and has remained at this level since then. The recent erosion of voter turnout may be associated especially with younger people not voting in elections (1).

I did feel vulnerable after the terror attacks in Paris. I know that I'm not in more danger today than last week, but I no longer feel safe and confident in the same way. That's why I wanted to find out more about safety and security. To give an indication of the crime level and provide guidance on safety, homicide offences can be used as a proxy. These are acts resulting in the death of another person such as murder and manslaughter. Among the EU Member States, the highest homicide rates in 2014 could be observed in the three Baltic Member States, headed by Lithuania with a homicide rate of 5.4 per 100 000 inhabitants and followed by Latvia (3.2 per 100 000 inhabitants) and Estonia (3.1 per 100 000 inhabitants). Homicide rates in the remaining Member States varied between 1.6 per 100 000 inhabitants in Finland and 0.7 per 100 000 inhabitants in the Czech Republic.



Criminal statistics don't always reflect whether an individual feels safe. When asked if they feel safe walking alone in their area at night in 2013, 74.7 % of the EU-28 population felt 'very safe' or 'fairly safe'; only 6.8 % felt 'very unsafe'. This sense of physical safety is partly associated with age. Perceived insecurity rose with each age group, starting from the age of 50. In 2013, 40.5 % of people older than 75 felt 'a bit unsafe' or 'very unsafe'. This is almost twice the value

(1) Delwit, P. (2013), *The End of Voters in Europe? Electoral Turnout in Europe since WWII*, Open Journal of Political Science, vol. 3 (1), pp. 44–52.



Trust & Safety



Trust in institutions, EU-28, 2013 (Rating 0-10)

EU inhabitants had the highest confidence in the police (5.9 out of 10) followed by the legal system (4.6 out of 10) and least trust in the political system (3.5 out of 10)



People with higher education levels had more trust in institutions than those who were poorly educated:



Context

Safety situation



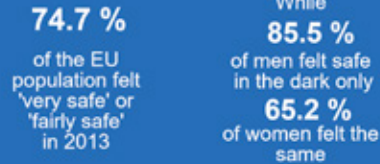
Homicide rates in the remaining Member States varied between



Intentional homicide offences give an indication of the level of criminalisation and provide guidance on the safety situation

Perceived physical safety

Feelings of safety when walking alone at night



13.6 % of the EU population reported crime, violence or vandalism in their area in 2015



Source: Eurostat (online data codes: ilc_pw03, tsdgo310, crim_hom_soff, ilc_mddw03, Quality of life — Data — Economic and physical safety and Quality of life in Europe — facts and views — economic and physical safety)

of the age group 35 to 49 years, in which only 20.7 % felt this way. There are also huge gender differences when it comes to physical safety. While 85.5 % of men reported feeling very or fairly safe, only 65.2 % of women had the same perception.

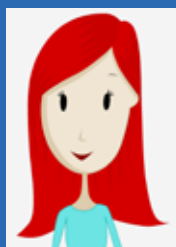
I also learned that between 2010 and 2015 the number of people reporting crime, violence or vandalism in their area has been to some degree stable around 14 % on average in the EU. However, people with an income lower than 60 % of the median income, who are considered at risk of monetary poverty, report higher rates than people with a higher income. In 2015, 16.5 % of people at risk of monetary poverty reported experiencing crime, violence or vandalism in their neighbourhoods, while only 13.0 % of people with higher incomes reported these problems.

As we walked home I saw that many people were still out on the street in our trendy neighbourhood, drinking in bars or walking home. Nothing appeared amiss.

Zoe opened the door before we put the key in the lock — as if she'd been watching out for our return. This made me think about another important aspect of a secure and safe society: people looking after each other.

9

Gender gaps in income, employment and decision-making



Sustainable development: A blog from everyday life

#sustainabledevelopment #employment #environment
#SDGs #poverty #young #eurostat

Anne @SustainableAnne | November 20

Last Thursday I left university early and ran back home to slip into my smartest dress. That evening I was attending the award ceremony for my 'Young Women in Journalism' scholarship. I arrived just in time to collect my badge and meet the rest of the winners. I was also able to bring a friend, so Sophia came with me.

During the ceremony women activists and journalists talked about their work. We heard about different forms of discrimination and violence against girls and women but also about ways to empower and support them. One woman talked about her organising work with a union of mainly female precarious workers that is pressing for living wages, benefits and security. Sophia was very interested in this because she often did casual hotel cleaning work.

The speaker said the success of their campaigns owed much to 'crusading' citizen journalists spreading the word on social media. That gave me pause for thought: is that what I'd like to do?

Another speaker, representing the UN, focused on sustainability and especially SDG 5, which sets the objective of achieving gender equality and empowering all women and girls. She wanted to discuss the issues women in the EU are facing in their everyday lives.

The UN representative mentioned that an objective of **SDG 5 'Gender equality'** is to 'end all forms of discrimination against all women and girls everywhere'. Women often face discrimination in the labour market, where they are often confronted with a gender pay gap and a gender employment gap.

The 'gender pay gap' is the difference between what men and women earn for each hour spent at work. Reasons for this gap include direct discrimination in the labour market, the

stereotyping of women and the unequal distribution of family responsibilities such as childcare ⁽¹⁾. Women's lower earnings also affect their future pension rights and may result in more women than men experiencing poverty in old age.

The gender pay gap in the EU was about 16 % in 2014, which means that for every hour worked, women earned only 84 % of what men earned. The situation gets even worse as women age. There are wide differences in the gender pay gap across the EU. In Malta and Slovenia, women earned almost as much as men for each hour spent at work (the difference was less than 5 %), while in Estonia, Austria, Czech Republic, Germany and Slovakia women earned less than 80 % of what men earned.

Achieve gender equality and empower all women and girls

5 GENDER EQUALITY



Goal 5 aims to empower women and girls to reach their full potential, which requires eliminating all forms of discrimination and violence against them. It seeks to ensure that they all have the opportunity for sexual and reproductive health and reproductive rights; receive due recognition for their unpaid work; have full access to productive resources; and enjoy equal participation with men in political, economic and public life.

Women are disadvantaged in the labour market, not only in earnings but also in terms of finding employment in the first place. The 'gender employment gap' represents the difference in employment rates between men and women. Although nowadays more women get paid work, their share is still lower compared to men. In addition, women are more likely to work part-time and under time-limited contracts than men. In 2015 the gender employment gap was particularly high for people in their early 30s (13.9 percentage points) and for people between 55 and 64 years (13.2 percentage points). In contrast, women in their early 20s face the least discrimination in the labour market (the gender employment gap in this age group was 6.1 percentage points).



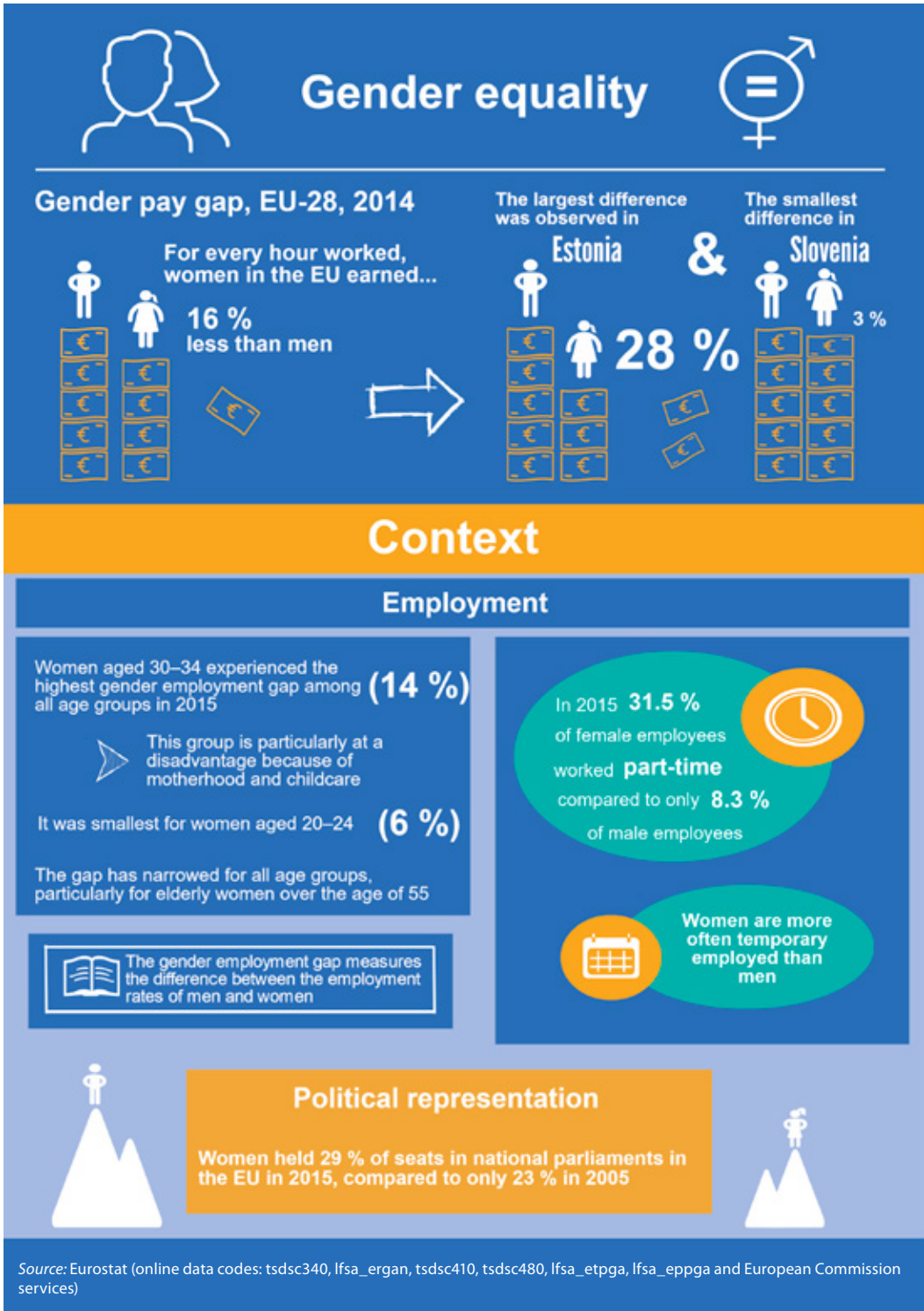
What's the reason behind these differences? Looking at the issue intuitively, women are at a disadvantage in their early 30s because of motherhood and childcare responsibilities. The longer a person has been unemployed, the harder it becomes to find a job, so this disadvantage can transfer to later years in life as well. The large gender gap for older women could be the result of women not participating in the labour force when they were young or reflect the lack of care facilities for grandchildren or dependent parents ⁽²⁾.

Still, the gender employment gap is narrowing at all ages, supported by changes in social values and attitudes, as well as policies enabling women to reconcile paid work with household responsibilities such as childcare and flexible working hours ⁽³⁾.

⁽¹⁾ European Commission (2014), *Tackling the gender pay gap in the European Union*, Publications Office of the European Union.

⁽²⁾ European Commission (2015), *Labour market participation of women*, European Semester Thematical Fiche.

⁽³⁾ European Commission (2016), *Employment and Social Developments in Europe 2015*, Luxembourg, Publications Office of the European Union, p. 22.



When I think about the generations of women in my family, I realise that I take a lot for granted. My granny dropped out of school early to help with the household chores. My mother was the first girl in her family to go to university. Going to university was a natural step for me. I didn't have to think much about it. In many parts of the world, however, girls still face barriers to education.

In Europe the situation is different. In fact, girls nowadays are less likely to drop out of school and more likely to gain university education than boys. In 2015 only 9.5 % of girls aged 18 to 24 left school early compared to 12.4 % of boys in the same age group. More and more girls are enrolling in university. While in 2002 less than 25 % of both girls and boys aged 30 to 34 had studied at university, today this share is 43.4 % for girls and only 34 % for boys.

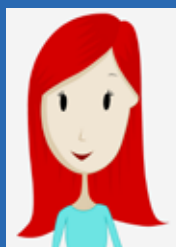


The UN representative concluded that to achieve greater gender equality, we also need to ensure that more women take leadership positions. SDG 5 calls for women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life. Although comprising about 50 % of the world's population, women continue to be underrepresented as elected officials. In 2015, 29 % of seats in national parliaments in the EU were held by women. This was somewhat higher than in 2005 when only 23 % of seats were occupied by women, but still far from the level that SDG 5 strives to attain.

So will I be a crusading journalist or run for office at some point? Perhaps I could set my sights on both.

10

Where do Europe's jobs come from?



Sustainable development: A blog from everyday life

#sustainabledevelopment #employment #environment
#SDGs #poverty #young #eurostat

Anne @SustainableAnne | November 25

A few days ago, I went to see my dad. He was sitting on the old couch with a cup of coffee and a financial journal. He showed me an article about the increase in shares of electric cars and said I should read it, given my interest in sustainable development. I told him I probably won't understand half of the financial concepts in the article, thinking of next semester's economics course with a shudder.

Since you've heard my grandfather's opinions, it's only fair that my dad has a chance to talk about his work. I told him I'm recording the conversation since I wanted to feature his comments in my blog. Unlike some of my friends, who get self-conscious about being recorded, my dad looked pleased. No doubt he'll ham it up.



'So exactly what are you doing at your job as a green investor'? I asked.

Dad said he helps people invest in green businesses and infrastructure that have a minimal or positive impact on the environment. I recalled conversations from four years ago, when he'd go on about stocks and bonds for ages. He's undergone a complete transformation... well, not that complete.

'Dad, you really should stop heating the whole house now that I'm not living here anymore,' I told him. 'And when are you going to install those solar panels you bought last summer? You should start making green investments in your own home.'

'Yes, but much bigger investments are needed if we want to make a visible difference. Upgrading technologies will be crucial for making industries more sustainable,' Dad explained.

'What about jobs though?' I asked. 'I've heard a lot about technologies destroying jobs, especially for less skilled workers.' My dad explained that manufacturing is still the largest employment sector in the EU. It also drives economic growth, which in turn creates more jobs. The high and medium-tech industry sectors in particular boost economic growth and productivity, and generally provide high value-added and well-paid employment.

This brings me to **SDG 9 'Industry, innovation and infrastructure'**, which calls for substantial increases in industry's share of employment and GDP along with upgrading technologies to make industries more sustainable. Although shrinking, manufacturing is still the biggest sector when it comes to employment. The share of workers employed in the manufacturing sector gives an indication of its contribution to the economy and the labour market, and is thus directly related to the aspects of the goal mentioned above.

Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



Goal 9 focuses on the promotion of infrastructure development, industrialisation and innovation. This can be accomplished through enhanced international and domestic financial, technological and technical support, research and innovation, and increased access to information and communication technology.

In 2015, 33 million people aged 20 to 64 were employed in the manufacturing sector which equals 15.6 % of all people employed in the EU. Currently 5.7 % of EU workers are employed in the high and medium-high technology manufacturing sectors. This is close to the share observed in 2008 (5.9 %).

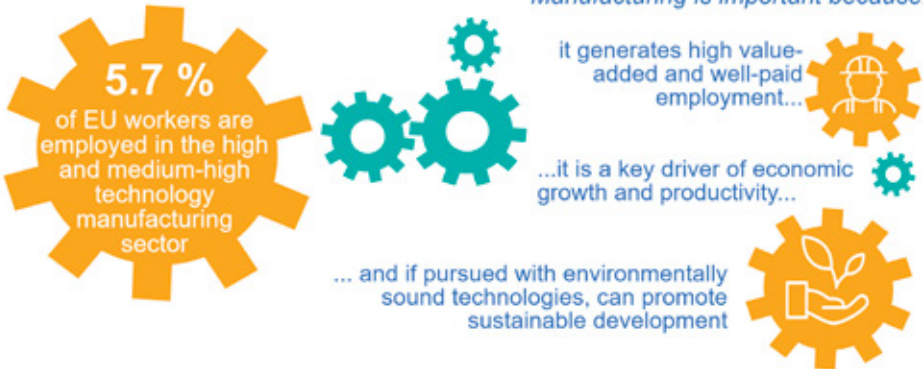
Growth in jobs is unequally distributed across economic sectors and depends on general economic conditions as well as developments in these sectors. Between 2008 and 2015, the number of employed people, aged 20 to 64, grew most in the professional, scientific and technical sector (by 14.9 %) and the administrative sector (by 14.5 %). At the other end of the spectrum, employment declined most in the construction (– 19.9 %) and agricultural sectors (– 11.5 %). Employment in the manufacturing sector decreased by 10.7 %.

I thought about Zoe's brother: he left school early and worked on building sites. He lost his job during the economic crisis and had to move back with his parents. He found a new job a few weeks ago, so he hopes to be able to move out again if this employment continues. That would be cause for celebration because he was treated like a teenager while living with his parents... Zoe would be pleased too because we won't have him regularly sleeping on our sofa after a night out.

According to my dad, the fact Zoe's brother found a new job is a sign that the economy is recovering. But I replied that his new job is only temporary so far. I was thinking again about **SDG 8 'Decent work and economic growth'** and the union activist's speech at my awards ceremony: we also need to consider the quality of the new jobs on offer.

Industrialisation

Employment in manufacturing, EU-28, 2015



Context

GDP per capita

is often used as a proxy for measuring a country's material living standards
It is closely linked to *employment*

GDP per capita increased by 1.0 % per year on average between 2000 and 2015

Growth reversed during the economic crisis of 2008 and in 2009 dropped by 4.6 %

The link between GDP growth and employment growth is also reflected in the share of **newly employed people**

The indicator has followed a similar path of development as GDP per capita

Newly employed persons are people who started their current work in the past 12 months

Employment growth

Between 2008 and 2015, employment increased the most in the professional, scientific and technical sectors...

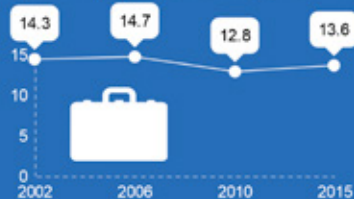


...and declined the most in the construction and agriculture sectors



Newly employed persons, EU-28, 2002–2015

(% of employed persons aged 20–64)



Source: Eurostat (online data codes: tsc00011, lfsa_ewnasn, lfsa_egan2, tsdec100, lfsa_pganws and lfsa_ergan)

The number of newly employed people reflects the link between economic growth and employment growth. The share of newly employed people as a share of total employment dropped in 2009 after the economic contraction in the same year. In 2014, following the slight recovery in GDP and employment, the share of newly employed people rose to 13.1 % and continued to 13.6 % in 2015. I also found this pattern for the relationship between the total employment rate and GDP, which I investigated in my blog entries on education and employment. I now want to come back to that and look more closely at employment.

Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

8 DECENT WORK AND ECONOMIC GROWTH



Continued, inclusive and sustainable economic growth is a prerequisite for global prosperity. Goal 8 aims to provide opportunities for full and productive employment and decent work for all while eradicating forced labour, human trafficking and child labour.

The chances of finding a job are not equal for all. Younger and older people have lower employment rates than people aged 30 to 54. In 2015 their employment rate was 9.1 percentage points higher than the total employment rate of 70.0 % for people in working age (20 to 64). The employment rate of people in their 20s was 8.6 percentage points lower than the total employment rate. The lowest employment rate was faced by the group aged 55 to 64 years — only 53.3 % of them had a job in 2015.

Also an individual's country of origin can affect opportunities in the labour market, although economic migration is increasingly important to the EU's ability to deal with a shrinking labour force and expected skills shortages ⁽¹⁾. In 2015, the employment rate for third-country nationals was 56.7 %, 13.3 percentage points lower than the total employment rate in the EU.



One explanation for the gap in employment rates between EU citizens and third-country nationals might be that a large proportion of non-EU citizens have lower levels of education. However, analysis shows this is not the norm and the share of third-country migrants with at least upper secondary education who work in low-skilled occupations is higher than for the native population. Also, in many Member States a large share of non-EU citizens migrated not for economic reasons but to join family members, for education and training or to seek international protection ⁽²⁾.

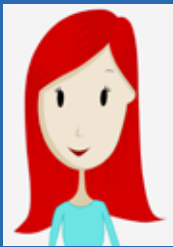
At the end of the discussion I thanked Dad. And I told him that I looked forward to a rematch between him and Grandpa at the next family gathering.

⁽¹⁾ European Commission (2010), *An Agenda for new skills and jobs: A European contribution towards full employment*, COM(2010) 682 final, p. 9.

⁽²⁾ European Commission (2016), *Employment and Social Developments in Europe 2015*, Luxembourg, Publications Office of the European Union, p. 14.

11

A new agreement on global climate change



Sustainable development: A blog from everyday life

#sustainabledevelopment #employment #environment
#SDGs #poverty #young #eurostat

Anne @SustainableAnne | November 30

I was so excited when the opportunity to cover the Paris climate summit as part of my scholarship came up. But first let's give the summit its proper title: the United Nations Framework Convention on Climate Change (UNFCCC) 21st Conference of the Parties (COP 21).

This would be my second visit to Paris this year — I'd been to Paris last spring when Mark was running in the international Paris marathon. I was aware that the aftermath of the terror attacks weighed heavily on the city, but an event like this seemed a good way to get back to a secure and positive footing.

On this trip to Paris I aim to look at how the summit tackles the SDGs and what it accomplishes, especially in terms of **SDG 13 'Climate action'**. This sets out the need for taking action to combat climate change as well as for strengthening resilience and adaptive capacity to its impacts.

Take urgent action to combat climate change and its impacts

Climate change presents the single biggest threat to development. Its widespread, unprecedented effects disproportionately burden the poorest and the most vulnerable. Urgent action is needed not only to combat climate change and its impacts, but also to build resilience in responding to climate-related hazards and natural disasters.

13 CLIMATE ACTION



Scientists agree that the dominant cause of climate change, a rise in the Earth's temperature, is the human-made increase of greenhouse gas emissions over the past 250 years ⁽¹⁾. The indicator greenhouse gas (GHG) emissions provides information on the development of these emissions in each country and insights into progress towards SDG 13 in relation to action to combat climate change.

The use of energy (through fuel combustion in energy industries, transport and manufacturing and construction) is the main source of GHG emissions in the EU, accounting for 78 % of total emissions in 2014. This is followed by emissions from animals and soils in agriculture (10 %), industrial processes (9 %) and waste management (3 %). Additional emissions are caused by land use changes, like ploughing up grasslands and the loss of forests (for example, when trees are cut down to make room for new construction). At the same time, European forests grow much faster than they are harvested and the difference is big enough for them to absorb as much as 10 % of all other carbon dioxide emissions combined.

The European Union has reduced its GHG emissions by 23 % between 1990, which is the base year of the Kyoto Protocol ⁽²⁾, and 2014, mainly due to reductions in the energy sector. Emissions have also been cut in all other sectors with the exception of transport (+ 13 %) and international aviation (+ 97 %). Emissions in these two areas have actually fallen since 2007 but are still above their 1990 levels because of fast growth during the 1990s.

Compared with other industrialised countries (Annex I of the Kyoto Protocol), the EU is leading in GHG emission reductions after the Russian Federation (– 29 % in 2014 compared to 1990). Most other industrialised countries have increased their emissions over the same period of time, including Australia (+ 25 %), New Zealand (+ 23 %), Canada (+ 20 %) as well as Japan and the United States (both + 7 %) ⁽³⁾.



The rise in surface temperature is the most obvious indication of a changing climate and is presented in the indicator on global surface temperature change. Records show that surface temperature is related to the concentration of greenhouse gases in the atmosphere, with a certain time lag between emission and temperature rise.

The global community agreed to limit the temperature rise to well below 2 °C above pre-industrial times and to pursue efforts to limit the temperature increase to 1.5 °C above pre-industrial levels, as the temperature rise is the main reason for experienced and expected climate-related hazards. This agreement was signed at COP 21 in Paris ⁽⁴⁾.

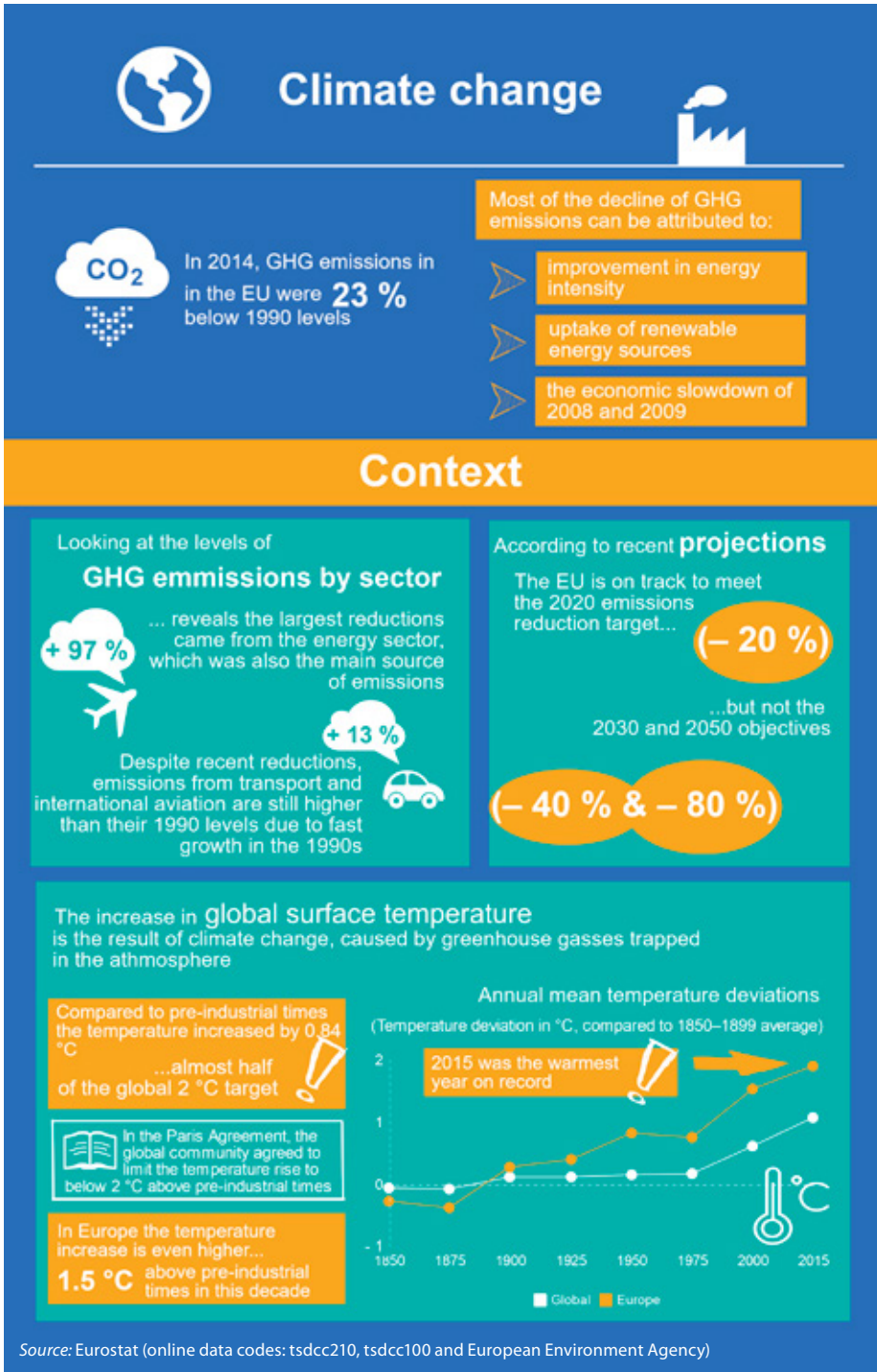
Globally, the average surface temperature has increased significantly since the beginning of the 20th century, with new heat records observed. Over the period 2006 to 2015, global surface average temperature was 0.84 °C above 'pre-industrial' levels, which refers to the

⁽¹⁾ IPCC (2014), *Climate Change 2014 Synthesis Report*, Geneva, Intergovernmental Panel on Climate Change, p. 4.

⁽²⁾ The Kyoto Protocol is an international agreement that includes legally binding greenhouse gas emission targets for the industrialised countries and aims for an overall reduction of at least 5 % on the 1990 level by the period 2008–2012. The protocol defined individual targets per country. The EU agreed to reduce its GHG emissions by 8 % and redistributed this target among its then 15 Member States under a burden-sharing agreement.

⁽³⁾ United Nations Framework Convention on Climate Change (2016), *National Inventory Submissions 2016*.

⁽⁴⁾ United Nations Framework Convention on Climate Change (2015), *Paris Agreement*, Paris, United Nations.



average temperature of the period 1850 to 1899 ⁽⁶⁾). This means that almost half of the warming towards the 2 °C threshold has already taken place. And the average global surface temperature continues to rise: 2015 was the warmest year on record.

The situation in Europe is similar: this decade is the hottest on record at 1.5 °C above pre-industrial times. The years 2014 and 2015 were the warmest on record in Europe, respectively, at 2.2 °C and 1.9 °C above pre-industrial levels.

I remember the discussions during my presentation on sustainable development, which highlighted preparations for the Rio climate summit four years ago. That was exciting, of course, but I was only observing from afar. Now I'm in the middle of it.

⁽⁶⁾ In line with the European Environment Agency, global average annual temperature deviations, 'anomalies', are discussed relative to a 'pre-industrial' period between 1850 and 1899 (the beginning of instrumental temperature records). During this time, anthropogenic greenhouse gases from the industrial revolution (between 1750 and 1850) are considered to have a relatively small influence on the climate compared to natural influences. However, it should be noted that owing to earlier climate changes due to internal and forced natural variability, there was not one single pre-industrial climate and it is not clear that there is a rigorous scientific definition of the term 'pre-industrial climate'. See <http://www.eea.europa.eu/data-and-maps/indicators/global-and-european-temperature-3>

12

Quenching our thirst: A water crisis?



Sustainable development: A blog from everyday life

#sustainabledevelopment #employment #environment
#SDGs #poverty #young #eurostat

Anne @SustainableAnne | December 13

Let's go back a moment to my visit to Paris last spring. While I was standing on the sidelines cheering Mark on in the marathon, I noticed something very different. An African woman in traditional dress was walking among the racers with a regular marathon number and a big plastic barrel of water on her head. She carried a placard that said in French: 'In Africa, women walk this distance every day to collect water. Help us shorten the distance'.

But water scarcity may also become an issue here in Europe. When I go on walks with Grandpa Robert through the national park we usually pass a small river that has dried out. And when I visited southern Italy last summer I found that this region is challenged by droughts.

So **SDG 6 'Clean water and sanitation'** is very relevant in the EU as well as Africa. It aims to ensure availability and sustainable management of water and sanitation for all.

Ensure availability and sustainable management of water and sanitation for all

6 CLEAN WATER
AND SANITATION



Goal 6 goes beyond drinking water, sanitation and hygiene to also address the quality and sustainability of water resources. Achieving this Goal, which is critical to the survival of people and the planet, means expanding international cooperation and garnering the support of local communities in improving water and sanitation management.

My starting point was the water quality of European rivers. Biochemical oxygen demand (BOD) shows how much dissolved oxygen is needed to decompose organic matter. Therefore, a high level of BOD is usually a sign of organic pollution. The cleanest rivers have a five-day BOD of less than 1 milligram per litre (mg/l). Moderately polluted rivers show values ranging from 2 to 8 mg/l. BOD values are especially high when wastewater such as urban or industrial sewage or agricultural run-off water reaches surface water bodies without any treatment. The BOD in European rivers fell from 2.95 mg/l in 2000 to 2.19 mg/l in 2012, indicating that river water quality improved. This is good news!

However, enhancing water quality doesn't help much if water is wasted. The water exploitation index (WEI) measures the extent of sustainable use of available water resources. The warning threshold of 20 % distinguishes a non-stressed from a water-scarce region, while severe scarcity occurs where the WEI exceeds 40 %. Among the 14 countries with available data in 2013, Cyprus (79.6 %) and Malta (48.2 %) showed severe water scarcity. These two countries also reported the highest increases in water exploitation between 2005 and 2013 — 6.5 percentage points for Cyprus and 13.7 percentage points for Malta. Spain had a WEI of 33.6 % in 2012, so it is considered a water-scarce region.



Back home I googled the African woman walking in the Paris marathon. She's from Gambia, and she represented a non-profit organisation that was building boreholes in her village. Through her walk she aimed to raise awareness about the difficulties African women face in accessing clean drinking water. So what are the figures on this issue for Europe and globally?

The share of the world population with access to an improved water source rose from 86 % in 2005 to 91 % in 2015. Improved water source refers to a piped household water connection inside a dwelling, plot or yard. It includes public taps or standpipes, tube wells or boreholes, protected dug wells, protected springs and rainwater collection.

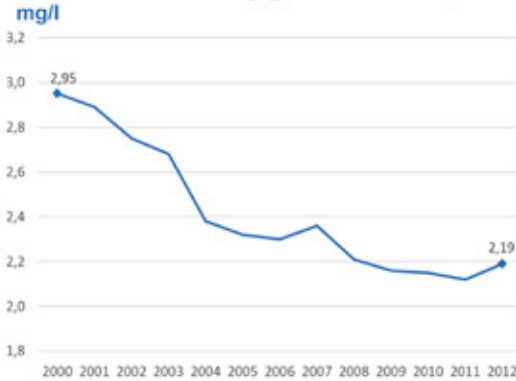
In the European Union nearly 100 % of the population do have access to an improved water source. In poorer countries it is more difficult for people to access water but their situation is improving. For example, in Sub-Saharan Africa the share of people with access to an improved water source rose from 59 % in 2005 to 68 % 2015.

SDG 6 is about access to sanitation as well as access to water. To me it is natural to drink tap water, take a bath or shower if I feel like it. An indoor flushing toilet is simply a given. Their availability plays an important role in healthy livelihoods and our well-being. In the majority of EU countries, bath, shower and indoor flushing toilet are present in most households. On average only 2.4 % had no access to at least one of these sanitary installations in 2015. The highest share was reported in Romania, with 30.5 % of the Romanian population having no access to these basic facilities. Also in Latvia (12.3 %), Bulgaria (11.1 %) and Lithuania (10.6 %) the share of the population without access to bath, shower and an indoor flush toilet was quite high.

So I was excited when the Paris Pact on Water and Adaptation to Climate Change was presented to the conference on 2 December. There were many discussions about water at this summit, much more than at previous UN climate meetings. Did pressure from non-governmental organisations — plus the action of a lone woman carrying a container of water on her head — play a part in this?

Water

Biochemical oxygen demand, Europe, 2000–2012



The biochemical oxygen demand in European rivers fell from 2.95 mg/l in 2000 to 2.19 mg/l in 2012

Lower biochemical oxygen demand indicates that water quality improved



Biochemical oxygen demand shows how much dissolved oxygen is needed to decompose organic matter

Context

Water exploitation

countries by water exploitation index in 2013

WEI > 40 % — severe water scarcity

Cyprus 79.6 %
Malta 48.2 %

WEI 20 % to 40 % — water scarcity

Spain 33.6 % (in 2012)

WEI < 20 % — non-stressed areas

Poland (17.8 %), Romania (15.2 %), Estonia (14.2 %), Germany (13.3 %), Czech Republic (10.3 %), Bulgaria (5.1 %), Denmark (4.7 %), Slovenia (3.6 %), Luxembourg (2.6 %), Slovakia (0.8 %), Latvia (0.7 %) and Croatia (0.6 %)

The water exploitation index (WEI) shows the water abstraction per year as a percentage of the long-term annual average available water resources

Access to water and sanitation



access to an improved water source increased from 86 % in 2005 to 91 % in 2015 for the world population

In high-income economies 100 % of the population had access to an improved water source

In low-income economies it was only 66 % in 2015



2.4 % had no access to a bath, shower or indoor flushing toilet in the EU in 2015

Romania is a clear exception with 30.5 % having no access to such basic facilities

Source: Eurostat (online data codes: tsdnr310, tsdnr330, ilc_mdho05 and WorldBank)

13

Better and longer lives in the EU?



Sustainable development: A blog from everyday life

#sustainabledevelopment #employment #environment
#SDGs #poverty #young #eurostat

Anne @SustainableAnne | December 16

On 5 December I went to the Global Village of Alternatives in Montreuil, eastern Paris. This was part of a more informal 'citizen's climate summit' running alongside COP 21. Grandpa had urged me to go there and report back. Though it wasn't really part of my official scholarship duties I was still interested in finding out more.

Ensure healthy lives and promote well-being for all at all ages

3 GOOD HEALTH
AND WELL-BEING

Goal 3 aims to ensure health and well-being for all at all ages by improving reproductive, maternal and child health; ending the epidemics of major communicable diseases; reducing non-communicable and environmental diseases; achieving universal health coverage; and ensuring access to safe, affordable and effective medicines and vaccines for all.



There was a festive atmosphere with theatre, music, discussions and stalls. While I found some common ground with what I've written about so far, the emphasis here was on living very different lives — themes included work and wealth distribution and grassroots urban planning. Not all of these alternatives were my cup of tea but it did make me think. And this all made me wonder about what ways we have to determine happiness and well-being beyond income indicators.

This brings me back to **SDG 3 ‘Good health and well-being’**. I wrote about this in a previous posting, focusing on healthy lives. Now I want to concentrate on life expectancy, healthy life years and life satisfaction in the European Union. By ‘healthy life years’ I mean years without disabilities or limitations in functioning.

Girls born in the EU in 2005 could expect to live 81.5 years. This was 6.1 years longer than boys born in the same year (75.4 years). Between 2005 and 2014 life expectancy for both women and men rose respectively by 2.1 and 2.7 years. The bigger gain for men indicates that the life expectancy gender gap is closing.

In contrast to overall life expectancy, healthy life years do not show a gender gap or an improvement over time. During the last 10 years it has been relatively stable at around 62 years for women and 61.5 years for men. Between 2005 and 2014 it fell by 0.7 years for women and grew by 0.3 years for men (1). This means people get older but do not spend the life years they gained in a healthy condition; they have to live with some kind of activity limitation. As women’s overall life expectancy is higher than men’s they spend a greater share of their lives with a disability or disease.

So longer life expectancy does not necessarily mean healthier life. In this regard, how much do we enjoy our longer lives? On a scale of 0 (‘not satisfied at all’) to 10 (‘fully satisfied’), European residents on average rated their overall life satisfaction at 7.1 in 2013. Women and men were equally satisfied. Education has a positive impact on the perception of life. In 2013, on average people with lower secondary education at most rated their overall life satisfaction at 6.6, which was 0.5 points less than among holders of upper secondary education (7.1) and 1.0 less than among tertiary graduates (7.6).

In a magazine I read about the ‘U-bend of life’; people get unhappier with their lives until their middle age and then happier again when they become older. According to what I found in the data this is not true for Europe. Here, life satisfaction declines with age; while people between 16 and 24 years old rated their life satisfaction as 7.6 on average, people aged 75 and older on average rated it 6.8. People with tertiary education are not as strongly affected by declining life satisfaction with age as people with lower educational levels. Another factor related to life satisfaction is income. People in the lowest income quintile had the lowest average score (6.3) while people in the highest quintile rated 7.7.



However, when talking to my friends and also thinking about myself, I think there must be more to life than being able to pay bills. I think life is about trying out new things and finding out who I am. That’s why I’m taking a deeper look into the statistics on non-monetary aspects of life satisfaction.

Time is a precious commodity and being able to spend time on our own areas of interest contributes to our overall life satisfaction. In 2013, the majority of EU residents (49.2 %) reported medium satisfaction with their time use, 28.1 % reported low satisfaction and 22.7 % high satisfaction. On a scale of 0 to 10 this equals a mean satisfaction with time use of 6.7 for the EU as a whole. The older (65+) and the youngest (16 to 24 year olds) age groups were the most satisfied with figures between 7.2 and 7.6, while the age groups in between rated their

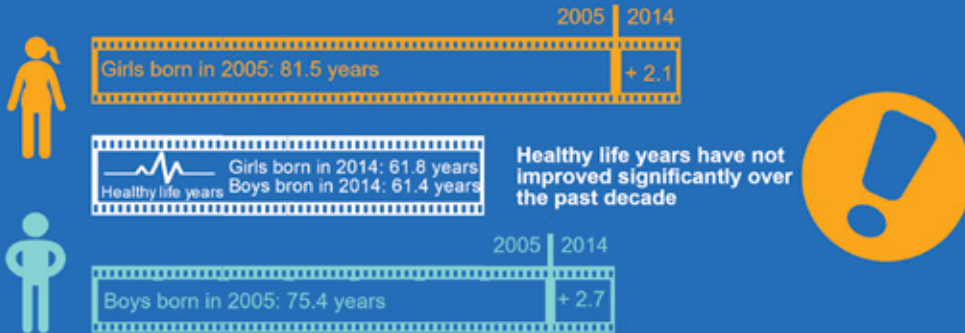
(1) 2005 data refer to EU-27, 2014 data to EU-28.



Health & Well-being



Life expectancy and healthy life years at birth, by sex, EU-28, 2005 and 2014



Context

Life satisfaction

Education has a positive impact on life satisfaction

by educational level:

- 6.6 lower secondary
- 7.1 upper secondary
- 7.6 tertiary

On a scale from 0 to 10 the average overall life satisfaction in the EU was **7.1** in 2013

Life satisfaction declines with age

by age group:

- 7.6 (16–24 years)
- 7.0 (35–49 years)
- 6.8 (75+ years)

Wealthier people are more satisfied than poor

Women and men are equally satisfied

Life satisfaction is higher among households with children

Source: Eurostat (online data codes: tsdph100, ilc_pw01, ilc_pw02, ilc_pw05, hlth_silc_02 and Quality of life in Europe — facts and views — overall life satisfaction)

satisfaction with time use only between 6.2 and 6.7. Maybe this is because people between 25 and 64 who are working do have less time to spend on leisure activities. Another element is responsibility for children. Households with dependent children were less satisfied with their time use (6.3) than households without kids (7.0). Among all household types the least satisfied with time use were single parents (6.1) and the most satisfied were single people aged over 65 (7.7).

Supportive personal relationships are another notable factor for life satisfaction. In 2013, 44.8 % of people who couldn't count on friends or family when they needed help had a low level of life satisfaction, while only 9.4 % of this group had a high level of life satisfaction. On the other hand, of the people who had help available, only 19.0 % reported low life satisfaction while 22.7 % reported a high level of life satisfaction. The good thing is that the share of those without supportive personal relationships was quite small. Only 6.7 % reported that they did not have someone to rely on for help and the share of people who had no one to discuss personal matters with was only 7.1 %.



In one of my first blog entries I looked into self-perceived health but this was related to income. This time I wanted to look at it in light of life satisfaction.

In 2013, 67.7 % of the EU population reported good or very good health, while 9.5 % felt in bad or very bad health. Within the group reporting very good health, 36.9 % showed high life satisfaction. However, 7.1 % within the group with very bad health reported high life satisfaction. Therefore, it may be possible to have a satisfying life even in very bad health — although this is more than five times more likely if the health status is very good.

So overall, it seems that we are living longer but not necessarily better. Our extended life span does not include an extension of health. Life satisfaction is something we have partly in our hands but many factors affect it and some are beyond our control. What they are and how the situation could be improved is a complex question. I don't know the answers, so I'd like to throw this open to my readers. What do you think?

14

Anne revisits sustainable development: Where do we go from here?

When Anne returns from Paris she meets up with Marta again at Beans International, the cooperative café. They start chatting and Anne talks about her experiences in Paris.

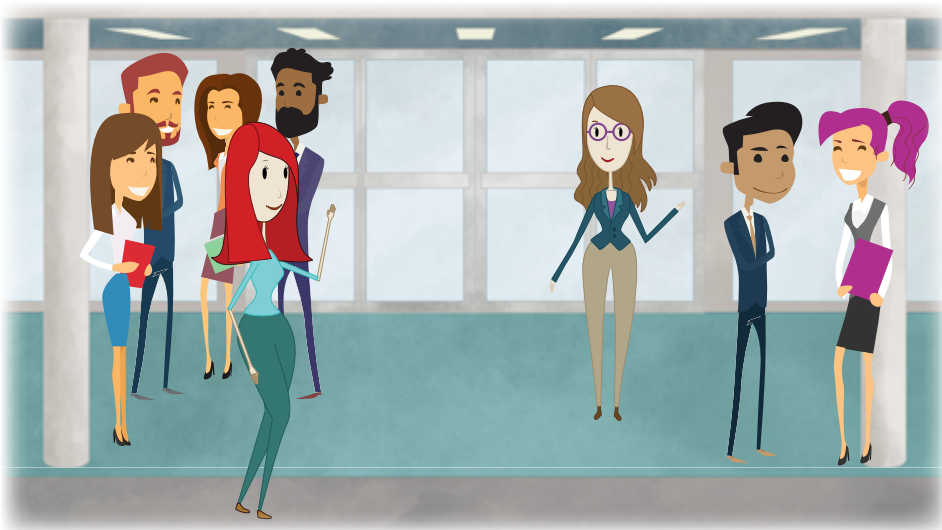
‘Your stories bring back fond memories of 2012 when I covered the Rio+20 climate summit,’ Marta says. She adds that she went on holiday in Costa Rica afterwards. ‘People are very poor there... but did you know Costa Rica has one of the highest rates of self-reported life satisfaction and very high life expectancy?’

‘That’s fascinating, given the issues I looked at in my post on life satisfaction,’ Anne says.

‘So tell me about these issues,’ Marta suggests. ‘How would you see them in relation to your recent findings?’

Anne takes her tablet out of her bag. ‘Good thing I have my notes with me. I know by now to always bring notes when I meet you.’ She clears her throat, imagining she’s addressing a room full of people.

‘Sustainable development can be described in three dimensions: economic, social and environmental. Environmental trends over the last years look good for the European Union. Member States have improved water quality in rivers, cut greenhouse gas emissions, increased



the share of organically farmed agricultural areas and boosted the share of renewable energy. We only see negative developments for preserving biodiversity, as shown by the continuing decline in bird indices.

Anne pauses as she considers how she'll move onto the next two dimensions of sustainable development. Her prolific notes are a kind of jumbled here, so it's hard to tell where one dimension finishes and another one starts. That gives her a clue.



'Due to the cross-cutting nature of several SDGs it's hard to analyse social and economic trends separately,' Anne continues. 'But I can tell you about combined social and economic aspects. This has been ambiguous and to be honest, partly negative. The number of people at risk of poverty or social exclusion is declining but still at a high level. Also, the employment rate is close to the pre-crisis employment level. On the other hand, long-term unemployed account for almost half of all unemployed people. The economic crisis had a huge impact on many of these developments. GDP per capita has just started to grow again and we have to see if economic growth will enhance the situation.'

Marta nods. 'Does anything stand out in your research?'

Anne sighs. 'Where do I start? With inequalities! With income there's the five-fold gap between the richest and the poorest 20 % of the population, but there are also persisting gaps between women and men in earnings, employment and seats held as elected officials.'

'The high youth unemployment rate comes to mind, which is twice the overall unemployment rate. And I also think about the declining job prospects for early school leavers, although the share of early leavers is falling and more and more people complete tertiary education. This is promising because the higher the educational level, the higher the chances of having a job.'



'I've also discovered that life expectancy is rising but not healthy life years. This brings me back to the relationship between health and income, as people in the lowest income quintile felt in worse health and had more unmet needs for medical care due to monetary reasons than the highest income quintile.'

'At the same time, income statistics don't reflect all factors affecting health and well-being. Your point about Costa Rica made me think. Although many European countries are much better off than Costa Rica economically, they ranked lower in life satisfaction and life expectancy. Now, I don't want to fall into romantic stereotypes about life outside of Europe. I'm sure that Costa Ricans face plenty of challenges, but it's still worth asking why European life scores are lower. Do we have less access to fresh healthy food? Do we face more pressure to work long hours? There is also the question of whether we live in communities where friends and neighbours look out for each other.'

'I was wondering if you looked into organised crime in Europe,' Marta says. 'That would also have an impact. I was thinking about figures on illicit financial flows, maybe seized arms... and what about protection of children from violence?'

'Well, I tried to. Those issues relate to SDG 16 — the one about peace, justice and strong institutions. But there's not always enough data, and we really need more information to evaluate these areas effectively. Statisticians are still working on better indicators to monitor everything related to the SDGs. In relation to SDG 16 especially, widening the range of data could strengthen our capacity to protect and empower all members of our society. I tried to do that in my post on life satisfaction, where I presented statistics on how people viewed their use of time and whether they felt they could count on friends and family.'



As she speaks, Anne recalls her relief when Zoe met her and Mark at the door after the reggae gig. Social bonds and solidarity do make such a big difference to the quality of life.

'But that's just a beginning in our approach to non-monetary indicators,' she adds. 'We'll definitely need more of them to meet the challenges that take us far beyond income. So how can we expand our statistical awareness to keep up with the world around us? I think we need to be open to new ideas. That's why I found the Global Village of Alternatives in Montreuil so interesting...'

Marta smiles. 'I agree. Finding the frameworks and the figures that will help us make the SDGs a reality will be a big challenge for statisticians — and ultimately a challenge for us all.'

Abbreviations and acronyms

GEOGRAPHICAL AGGREGATES AND COUNTRIES

- EU-28 The 28 Member States of the European Union from 1 July 2013 (BE, BG, CZ, DK, DE, EE, IE, EL, ES, FR, HR, IT, CY, LV, LT, LU, HU, MT, NL, AT, PL, PT, RO, SI, SK, FI, SE, UK)
- EU-27 The 27 Member States of the European Union from 1 January 2007 to 30 June 2013 (BE, BG, CZ, DK, DE, EE, IE, EL, ES, FR, IT, CY, LV, LT, LU, HU, MT, NL, AT, PL, PT, RO, SI, SK, FI, SE, UK)
- EU-15 The 15 Member States of the European Union from 1 January 1995 to 30 April 2004 (BE, DK, DE, IE, EL, ES, FR, IT, LU, NL, AT, PT, FI, SE, UK)

Note that EU aggregates are back-calculated when enough information is available — for example, data relating to the EU-28 aggregate is presented when possible for periods before Croatia joined the EU in 2013 and the accession of Bulgaria and Romania in 2007, as if all 28 Member States had always been members of the EU. The label is changed if the data refer to another aggregate (EU-27 or EU-15).

EUROPEAN UNION MEMBER STATES

BE	Belgium
BG	Bulgaria
CZ	Czech Republic
DK	Denmark
DE	Germany
EE	Estonia
IE	Ireland
EL	Greece
ES	Spain
FR	France
HR	Croatia

IT	Italy
CY	Cyprus
LV	Latvia
LT	Lithuania
LU	Luxembourg
HU	Hungary
MT	Malta
NL	Netherlands
AT	Austria
PL	Poland
PT	Portugal
RO	Romania
SI	Slovenia
SK	Slovakia
FI	Finland
SE	Sweden
UK	United Kingdom

EUROPEAN FREE TRADE ASSOCIATION (EFTA)

IS	Iceland
LI	Liechtenstein
NO	Norway
CH	Switzerland

EU CANDIDATE COUNTRIES

ME	Montenegro
MK	The former Yugoslav Republic of Macedonia (!)
AL	Albania
RS	Serbia
TR	Turkey

(!) The name of the former Yugoslav Republic of Macedonia is shown in tables as "FYR Macedonia". This does not prejudice in any way the definitive nomenclature for this country, which is to be agreed following the conclusion of negotiations currently taking place on this subject at the United Nations.

POTENTIAL CANDIDATES

BA	Bosnia and Herzegovina
XK	Kosovo ^(?)

UNITS OF MEASUREMENT

%	Percent
°C	Degree Celsius
EUR	Euro
GJ	Gigajoule
ha	Hectare
kg	Kilogram
l	litre
LSU	Livestock units
mg	Milligram
Mtoe	Million tonnes of oil equivalent
toe	Tonne of oil equivalent

ABBREVIATIONS

BOD	Biochemical oxygen demand
CO ₂	Carbon dioxide
DMC	Domestic material consumption
EFTA	European Free Trade Association
EU	European Union
GDP	Gross domestic product
GHG	Greenhouse gas
IPCC	Intergovernmental Panel on Climate Change
LDCs	Least developed countries
PPS	Purchasing power standards
SDGs	Sustainable Development Goals
UN	United Nations
UNFCCC	United Nations Framework Convention on Climate Change
WEI	Water exploitation index

^(?) This designation is without prejudice to position or status, and is in line with UNSCR 1244 and the ICJ Opinion on the Kosovo Declaration of Independence.

HOW TO OBTAIN EU PUBLICATIONS

Free publications:

- **one copy:**
via EU Bookshop (<http://bookshop.europa.eu>);
- **more than one copy or posters/maps:**
 - from the European Union's representations
(http://ec.europa.eu/represent_en.htm);
 - from the delegations in non-EU countries
(http://eeas.europa.eu/delegations/index_en.htm);
 - by contacting the Europe Direct service
(http://europa.eu/europedirect/index_en.htm)
 - Calling 00 800 6 7 8 9 10 11
(freephone number from anywhere in the EU) (*).

(* The information given is free, as are most calls (though some operators, phone boxes or hotels may charge you)

Priced publications:

- via EU Bookshop (<http://bookshop.europa.eu>).

Figures for the future

SUSTAINABLE DEVELOPMENT IN OUR EVERYDAY LIFE — A GUIDE FOR CITIZENS

'Leave no one behind', the central ethos of the Sustainable Development Goals (SDGs), guides Anne through her new project on sustainable development. Once again she is investigating whether the EU has moved towards sustainable development over the past 10 years, this time in the context of the SDGs. Based on indicators provided by Eurostat, she tries to find out how relevant the SDGs are in the European context.

Figures for the future is a statistical guide to the EU sustainable development indicators in the context of the SDGs. It communicates statistical figures as seen through the eyes of a fictional 21-year-old student, Anne. Anne aims to find answers to many questions that relate to our everyday lives and our future. What does it mean to be poor in Europe? How do we treat nature and our natural resources? Will there be jobs for young people like her? What about quality of life?

These and many other questions are answered while Anne is writing a blog on sustainable development as part of her Young Women in Journalism scholarship. She links events in her everyday life to the SDGs, and looks into the statistics behind them.

This book is a summary of all her blog entries.

For more informations

<http://ec.europa.eu/eurostat/>



Publications Office



PDF: ISBN 978-92-79-63222-8 10.2785/456498
Print: ISBN 978-92-79-63223-5 10.2785/852838