



WWF

REPORT

EU

2019



Global Footprint Network®  
Advancing the Science of Sustainability

EU OVERSHOOT DAY

LIVING  
BEYOND  
NATURE'S  
LIMITS

10 MAY  
2019

Front cover © ESA

WWF is one of the world's largest and most experienced independent conservation organisations, with over five million supporters and a global network active in more than 100 countries.

WWF's mission is to stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature, by conserving the world's biological diversity, ensuring that the use of renewable natural resources is sustainable and promoting the reduction of pollution and wasteful consumption.

The European Policy Office contributes to the achievement of WWF's global mission by leading the WWF network to shape EU policies impacting on the European and global environment.

**Global Footprint Network** is a research organization that is changing how the world manages its natural resources and responds to climate change. Since 2003 Global Footprint Network has engaged with more than 50 countries, 30 cities and 70 global partners to deliver scientific insights that have driven high-impact policy and investment decisions. Together, we're creating a future where all of us can thrive within our planet's ecological limits.

Lead authors: Tycho Vandermaesen and Rebecca Humphries at WWF European Policy Office.  
Mathis Wackernagel, Adeline Murthy, and Laetitia Mailhes at Global Footprint Network.  
Layout: bitter grafik, Hamburg  
Printed by ZwartOpWit - Drukkerij Bulckens, Herenthout



Certificate No. 17/319

Published in April 2019 by WWF – World Wide Fund For Nature (formerly World Wildlife Fund), Brussels, Belgium. Any reproduction in full or in part must mention the title and credit the above-mentioned publisher as the copyright owner.

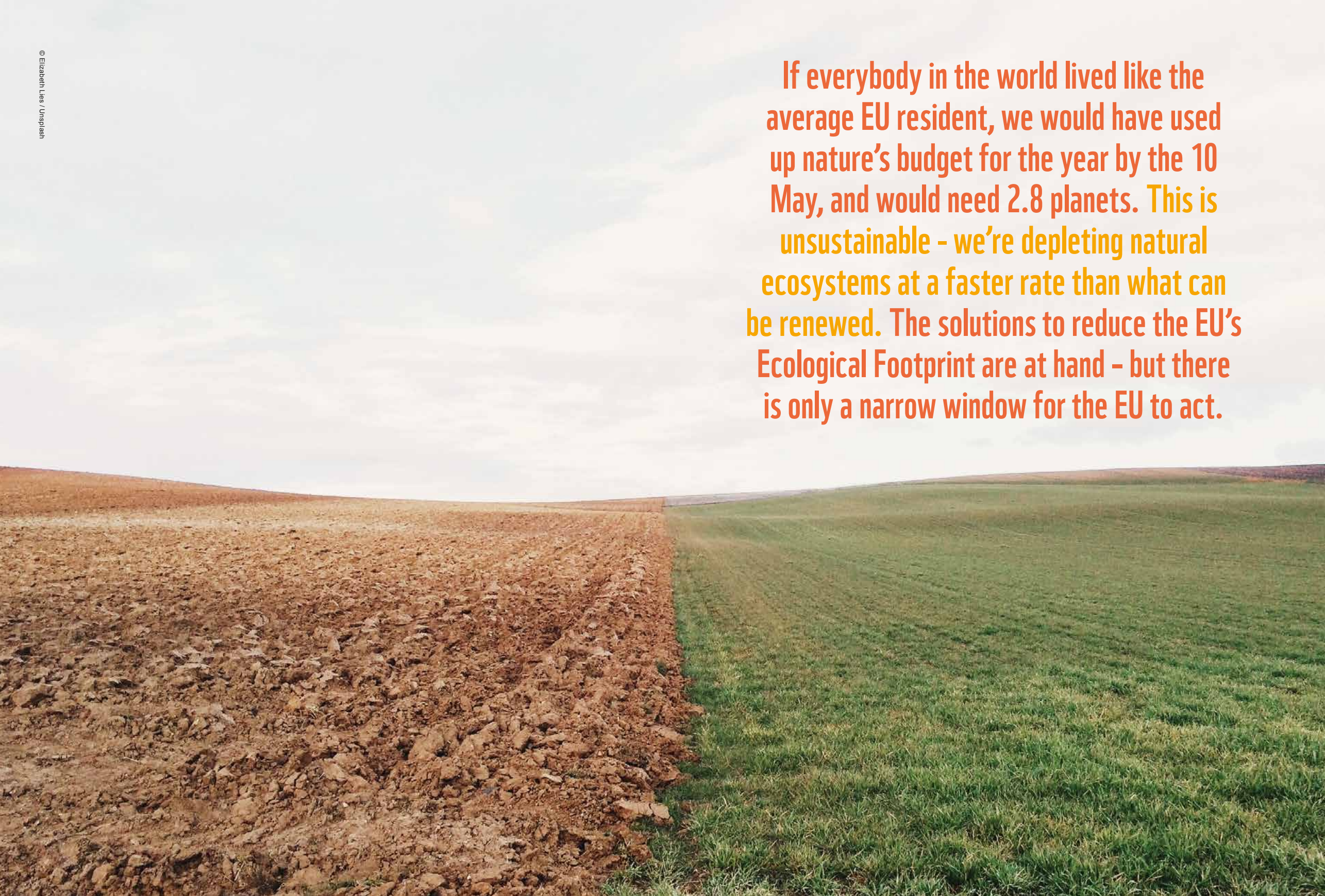
© Text 2019 WWF. All rights reserved.



This programme is implemented with the support of the European Union. The contents of this publication are the sole responsibility of WWF and can in no way be taken to reflect the views of the European Union.

# CONTENTS

EXECUTIVE SUMMARY	6
EDITORIAL	8
THE EU'S ECOLOGICAL FOOTPRINT ANALYSED	10
THE ECOLOGICAL FOOTPRINT AND BIOCAPACITY EXPLAINED	10
THE EU'S FOOTPRINT COMPARED TO THE REST OF THE WORLD	12
FOOTPRINT AND BIOCAPACITY IN THE EU	16
THE IMPACT OF OUR ECOLOGICAL FOOTPRINT ON BIODIVERSITY	20
WWF POLICY RECOMMENDATIONS: EUROPE AT A CROSSROADS	23
I. SHIFT TO SUSTAINABLE CONSUMPTION AND FOOD SYSTEMS	24
II. MAKE EUROPE CLIMATE-NEUTRAL BY 2040	26
III. RESTORE NATURE	27
IV. PROTECT THE OCEANS	29
V. FINANCING OUR SUSTAINABLE FUTURE	30
GLOSSARY	34
WHAT IS FOOTPRINT ACCOUNTING?	35



If everybody in the world lived like the average EU resident, we would have used up nature's budget for the year by the 10 May, and would need 2.8 planets. This is unsustainable - we're depleting natural ecosystems at a faster rate than what can be renewed. The solutions to reduce the EU's Ecological Footprint are at hand - but there is only a narrow window for the EU to act.

# EXECUTIVE SUMMARY

In 2019, the EU Overshoot Day falls on 10 May, based on the latest data produced by Global Footprint Network. The date of the EU Overshoot Day is calculated by comparing the EU's Footprint per resident to the globally available biocapacity per person. In other words, if everybody in the world had the same Ecological Footprint as the average EU resident – emitting as much carbon, consuming as much food, timber and fibres, and occupying as much built-up space – 10 May would be the date by which humanity would have used as much from nature than our planet can renew in the whole year. For the rest of the year, humanity would have to live off depleting the natural capital of the Earth. This means more carbon emissions than the planet's natural ecosystems can absorb, more biomass destroyed through deforestation than nature can regenerate, depleted fishing grounds, soil erosion and biodiversity loss.

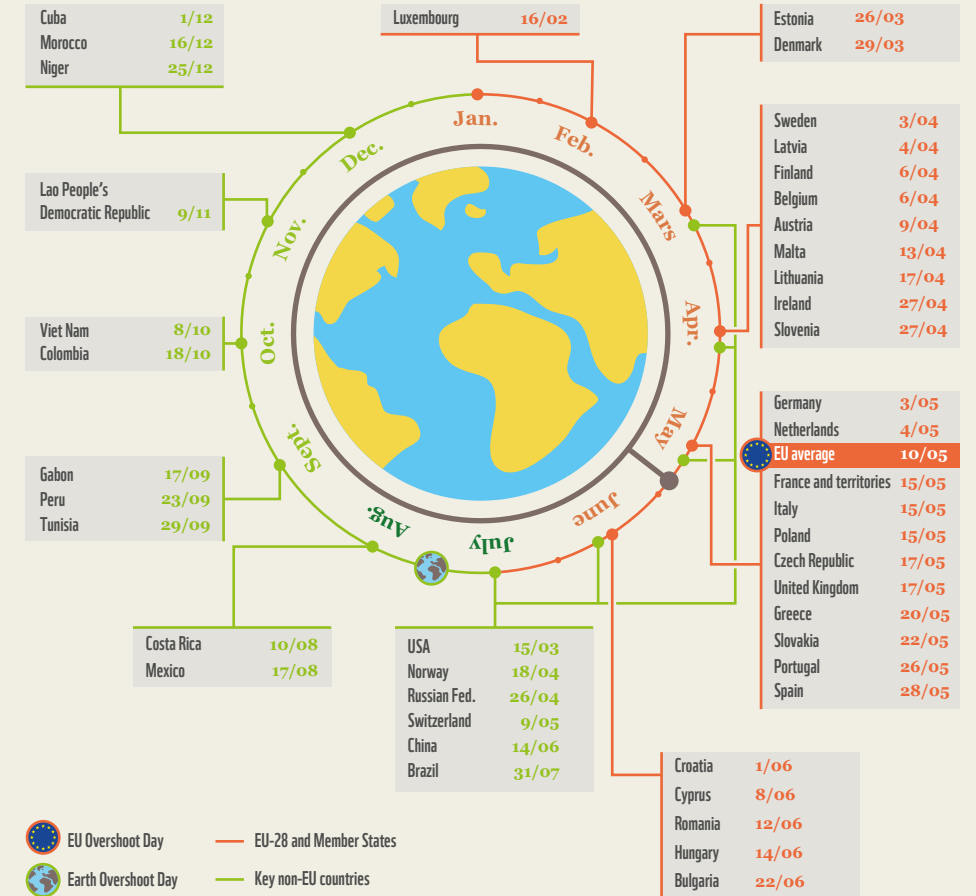
When taking into account the EU's Ecological Footprint and the biocapacity within its borders – meaning the biologically productive areas within the EU – the EU and its citizens are currently using twice more than what the EU's ecosystems can renew.

The EU's impact on the planet's resources is inequitable: the EU uses almost 20% of the Earth's biocapacity although it comprises only 7% of the world population. In other words, 2.8 planets would be needed if everyone consumed at the rate of the average EU resident. This is well above the world average which is approximately 1.7 planets. Whether at the regional or global level, human demand on nature is way beyond what is sustainable for our planet.

**20%**  
OF THE EARTH'S  
BIOCAPACITY  
IS USED BY THE EU,  
WITH ONLY 7%  
OF THE WORLD  
POPULATION



## OVERSHOOT DAYS ACROSS THE EU AND THE WORLD



The picture within the EU is not homogeneous either. Data shows a wide range between different countries' consumption patterns, although none of them stay within the planetary boundaries. Luxembourg is the first country in the EU to reach its Overshoot Day just 46 days into the year, whereas Romania comes last, using up the available resources for the entire year in 192 days – still earlier than the global average<sup>1</sup>. The reasons for these differences are diverse and discussed in this report.

<sup>1</sup> Earth Overshoot Day took place on 1 August in 2018.

# EDITORIAL



by Ester Asin,  
Director,  
WWF European  
Policy Office

**CONTINUING  
AT THIS RATE  
IS NOT ONLY  
NO LONGER AN  
OPTION, IT IS  
IRRESPONSIBLE**

If everybody in the world lived like the average EU resident, we would have used up nature's budget for the year by 10 May 2019 – almost three months before Earth Overshoot Day which takes place earlier and earlier every year.

These figures are stark and show that Europe is using up more than its fair share of the world's ecological resources. Yet we only have one planet, and we're depleting its natural ecosystems at a faster rate than they can be renewed. Continuing at this rate is no longer an option. It is also irresponsible. This carries a significant cost, both for our economies and our health: extreme weather events have cost the European economy €450 billion since 1980 and air pollution causes 430.000 premature deaths in Europe each year. By tackling climate change and environmental degradation, the well-being and quality of life of European citizens can be improved.

The solutions to tackle this crisis are within reach: numerous examples show it is possible to move towards a climate neutral society which is respectful of nature. Whether businesses, cities, and regions invest in the sustainable economy, or governments are pledging to achieve net-zero emissions, it is possible to make the right choices for our planet and for us all, leaving no one behind.

The upcoming European parliamentary elections of 23-26 May 2019 are a unique opportunity to let our elected representatives know that we trust them to lead the way, protecting us and the planet by stepping up for the environment and honouring the commitments of the Paris Climate Agreement. The way priorities set by national and European decision makers will determine whether they are up to the challenge: the next few years are decisive, the EU will need to take ambitious policy decisions to set us on the path towards climate neutrality, and to restore our nature and protect our environment both in Europe and globally. This is



© Global Warming Images / WWF

why WWF is calling for leaders across Europe to adopt a European Sustainability Pact with concrete goals and actions on climate change, nature and sustainable development to be achieved over the next five years.

The course of action would benefit not only the environment, but also our quality of life and well-being. As the Sustainable Development Goals show, the economy cannot thrive without putting the concerns of the environment and people at its centre. And if we are to safeguard the EU's security and stability, and ensure our resource security in the long term, tackling climate change and environmental degradation is not optional. Europe's continued leadership can only be guaranteed if it invests in those sectors that will be at the heart of tomorrow's economies, such as renewable energy, sustainable transport and environmentally responsible agriculture and fisheries.

Solutions are available. If we don't firmly decide to support them today, tomorrow will be too late. The appropriate policy decisions need to be taken now.

# THE EU'S ECOLOGICAL FOOTPRINT ANALYSED

## THE ECOLOGICAL FOOTPRINT AND BIOCAPACITY EXPLAINED

Human society is built on what is provided by nature. No value chain is possible without input from it. With every breath we take we depend on the quality of the air, the purity of the water and the richness of the biodiversity around us.

Nature and its resources are an integral part of our social and economic systems, and research increasingly shows nature's vital importance to our health, well-being, food and security. The welfare of human society is highly dependent on these resources. Ecological Footprint accounts help us quantify the size of our dependence.



**Grazing land footprint** measures the demand for grazing land to raise livestock for meat, dairy, leather and wool products.



**Forest product footprint** measures the demand for forests to provide fuel wood, pulp and timber products.



**Fishing grounds footprint** measures the demand for marine and inland water ecosystems needed to restock the harvested seafood and support aquaculture.



**Cropland footprint** measures the demand for land for food and fibre, feed for livestock, oil crops and rubber.



**Built-up land footprint** measures the demand for biologically productive areas covered by infrastructure, including roads, housing and industrial structures.

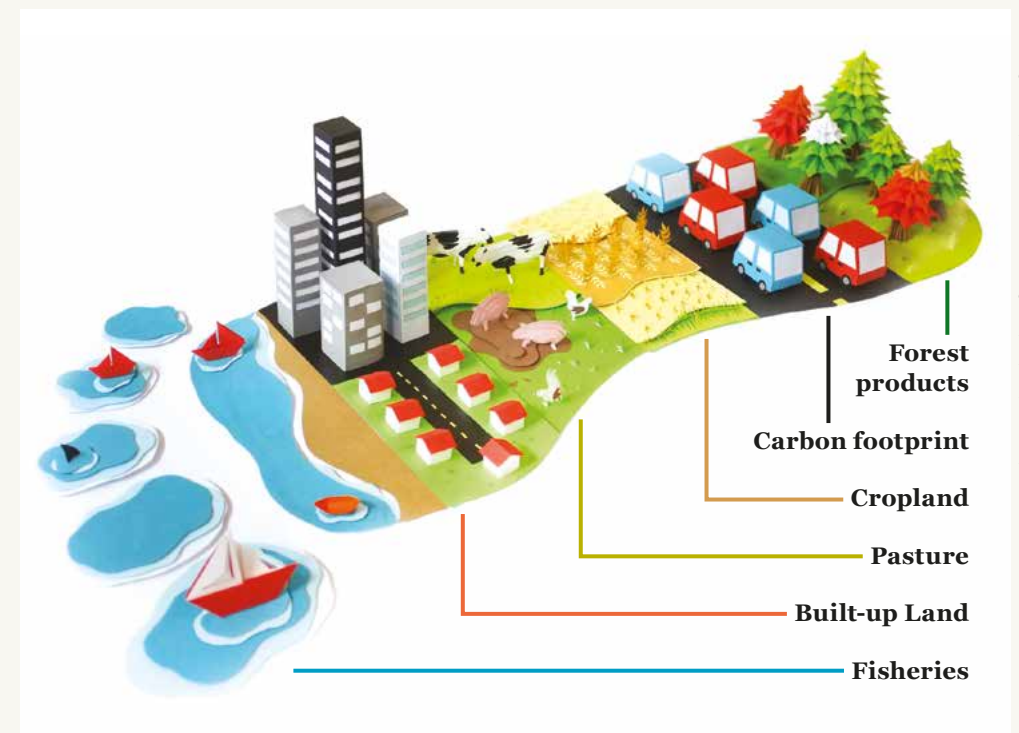


**Carbon footprint** measures carbon emissions from fossil fuel burning and cement production. These emissions are converted into forest areas needed to sequester the emissions not absorbed by oceans. It accounts for forests' varying rates of carbon sequestration depending on the degree of human management, the type and age of forests, emissions from forest wildfires and soil build-up and loss.

### These resource accounts have two sides:

The Ecological Footprint tells us how much nature we use; the biocapacity indicates how much nature we have. Both are measured in terms of biologically productive areas and expressed in global hectares (gha), i.e., world average biologically productive hectares. More specifically:

- **Biocapacity** is the ability of ecosystems to renew themselves; biologically productive areas of Earth provide this service.
- The **Ecological Footprint** measures the amount of biologically productive land and sea area required to produce all the resources that a population consumes and to absorb its waste, taking every year's technological advances into account. Competing demands for nature include food, fibre, timber, accommodation of roads and buildings, and sequestration of carbon dioxide from fossil fuel burning.



The Ecological Footprint for Sustainable Living in Japan (2016). WWF, Japan and GFN.

### THE EU'S FOOTPRINT COMPARED TO THE REST OF THE WORLD

Up to the early 1970s, our planet was able to provide more than what humanity demanded. Since then, our rate of consumption has increased, and is now significantly bigger than the Earth's rate of renewal – reaching the equivalent of 1.7 Earths.

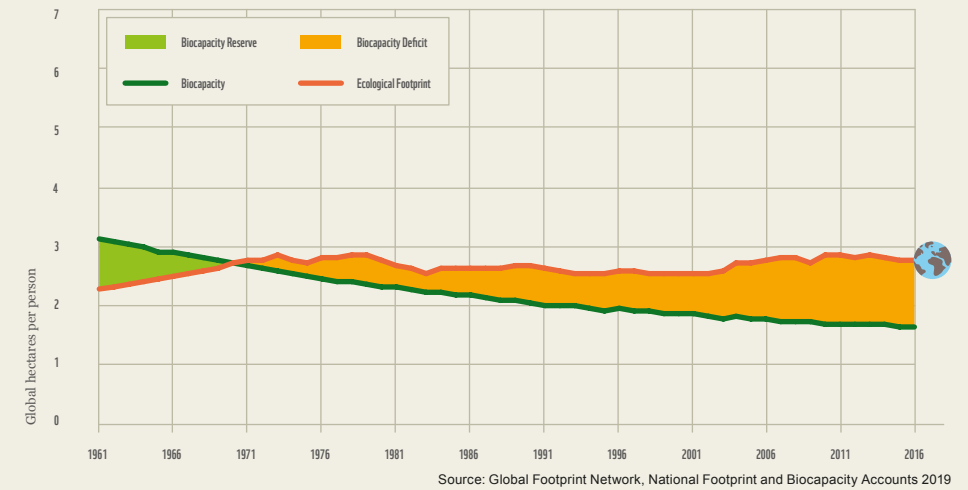
**FROM 1961 TO 2016  
THE ECOLOGICAL  
FOOTPRINT OF  
EU-28 COUNTRIES  
GREW FROM  
1.6 BILLION GLOBAL  
HECTARES (GHA) TO  
2.3 BILLION GHA**

The EU's Ecological Footprint based on its rate of consumption is even higher: our demand for ecological resources and the goods and services they provide is now equivalent to 2.8 Earths. From 1961 to 2016 the Ecological Footprint of EU-28 countries grew from 1.6 billion global hectares (gha) to 2.3 billion gha. The average Ecological Footprint of each EU-28 resident has decreased 19% since its peak in 2007. Much of this decrease however, is due to the economic contraction in the wake of the financial crisis, while some is driven by the shift to less carbon intensive energy sources. Yet, the EU's Ecological Footprint is not equitable: despite representing only 7% of the world's population, the EU uses up almost 20% of the global biocapacity. Currently, the EU runs a biocapacity deficit of 1.3 billion gha – this deficit is similar to the biocapacity of China.

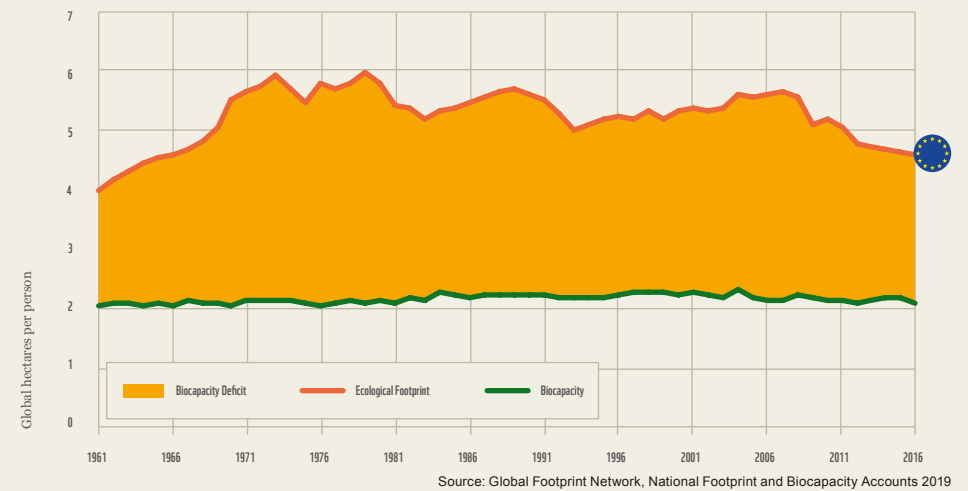


© la ma / Unsplash

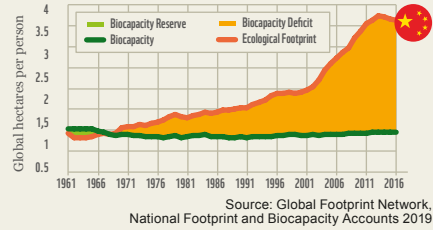
### THE EVOLUTION OF GLOBAL ECOLOGICAL FOOTPRINT AND BIOCAPACITY



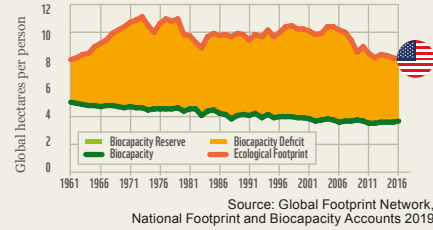
### THE EVOLUTION OF EU 28 ECOLOGICAL FOOTPRINT AND BIOCAPACITY



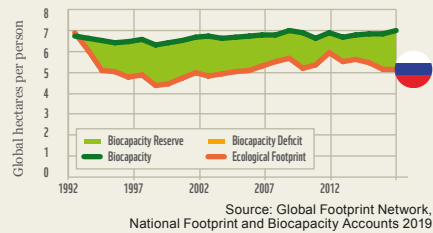
## CHINA



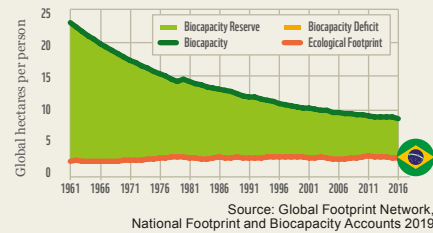
## UNITED STATES OF AMERICA



## RUSSIAN FEDERATION



## BRAZIL



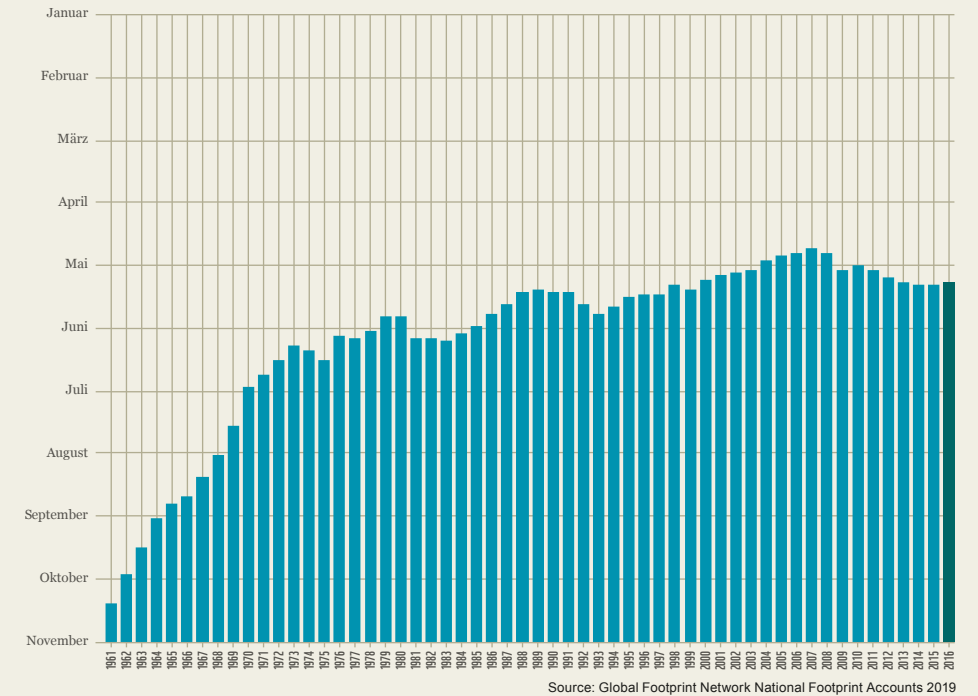
**IF THE EU WERE A COUNTRY, IT WOULD RANK IN 3<sup>RD</sup> PLACE**

Footprint trends vary enormously from country to country. China, the United States of America, India, Russia, and Brazil run the largest total Footprints in the world<sup>1</sup>, and if the EU were a country, it would rank in 3rd place. Even though China has a total Ecological Footprint that is two times higher than the United States' and the EU's, the US and the EU's Footprint per person is much higher. This is because China has a much larger population than the US and the EU, meaning consumption in the US and the EU per person is much higher. The steep increase in China's Ecological Footprint is mainly driven by carbon emissions and cropland Footprint.

Brazil has one of the Earth's largest biocapacity reserves. However this has been steadily declining over the past decades, while national and international demand for commodities has increased. Brazil's forest biocapacity per capita has decreased 11% since 1961. Russia<sup>2</sup> retains high biocapacity reserves. Its Ecological Footprint has dropped since 1992, mainly due to a decrease in its carbon Footprint as a result of partial de-industrialisation following the dissolution of the USSR and declining use of coal. In spite of this, Russia's per capita Footprint remains considerably higher than the world average per capita biocapacity.

<sup>1</sup> The top five countries with the highest total ecological footprint are China – 5.2b gha; the USA – 2.6b gha; India – 1.5b gha; Russia – 740m gha; and Brazil – 580m gha. The EU's total Ecological Footprint stands at 2.3b gha  
<sup>2</sup> Before 1992 Russia was part of the Soviet Union. Due to the differences in the land area between the former Soviet Union and the Russian Federation, it is not possible to have data for Russia before this point.

## EU-28 OVERSHOOT DAY 1961-2016



In the past several decades, human development has advanced at the expense of the planet. A shift is now needed in order to reach prosperity for all within the limits of our planet. The EU's Overshoot Day has moved forward dramatically since 1961, from 13 October back then to 10 May today. During the 1960s, the EU's Overshoot Day jumped forward at an extremely fast pace, and by the end of the decade was already taking place in July. Europe's overuse of natural resources continued to grow in the 1970s. The earliest ever EU Overshoot Day took place in 2007, on 23 April.

In 2019 the EU's Overshoot Day is on 10 May, far earlier than is sustainable. EU consumption is using biocapacity of countries, thereby increasing the EU's Ecological Footprint and depleting these countries' natural capital. If we want a sustainable future for people and planet, this trend must be reversed faster.

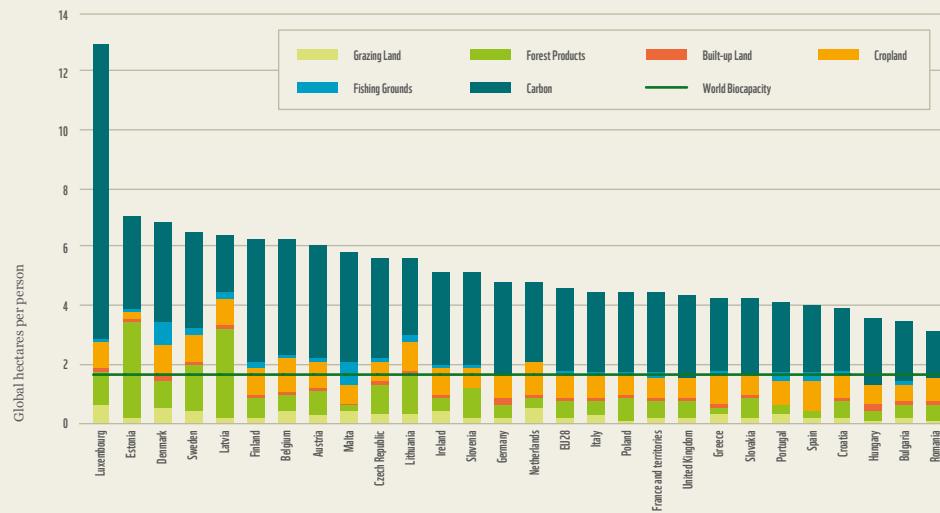
### FOOTPRINT AND BIOCAPACITY IN THE EU

The chart below includes EU countries<sup>3</sup> from highest Ecological Footprint to lowest. The size and composition of countries' per capita Ecological Footprint reflects the consumption of goods and services of an average person in that country. For most countries, the biggest component is the carbon Footprint, although some Member States such as Estonia, Sweden and Latvia also have high forest product Footprints. Luxembourg's extremely high carbon Footprint shows the effect of low fuel taxes—petrol is much cheaper than in surrounding countries, encouraging motorists from nearby regions to fill up at their pumps.

The graph shows that all EU countries are living beyond the means of our planet – every EU country's Ecological Footprint is well above the world average biocapacity per person, which stands at 1.6 gha today.

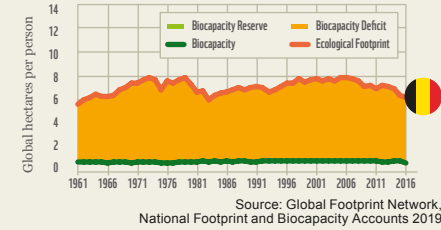
<sup>3</sup> With the exception of Cyprus, due to a lack of data.

### ECOLOGICAL FOOTPRINT PER COUNTRY PER CAPITA (2016)



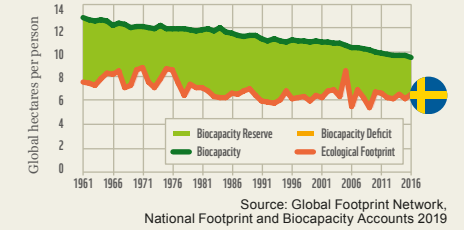
Source: Global Footprint Network, National Footprint and Biocapacity Accounts 2019

### BELGIUM



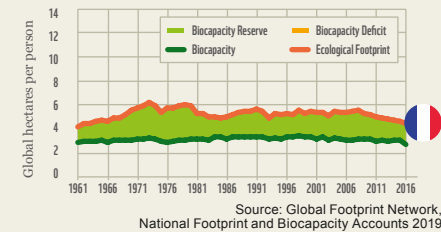
Source: Global Footprint Network, National Footprint and Biocapacity Accounts 2019

### SWEDEN



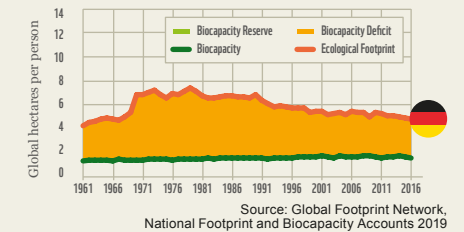
Source: Global Footprint Network, National Footprint and Biocapacity Accounts 2019

### FRANCE AND TERRITORIES



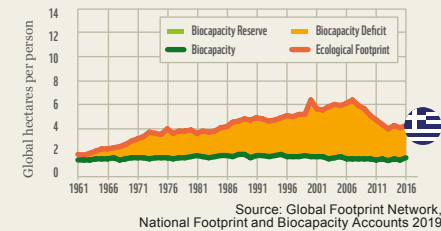
Source: Global Footprint Network, National Footprint and Biocapacity Accounts 2019

### GERMANY



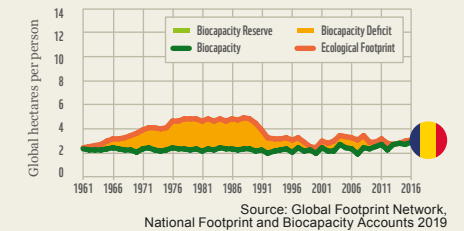
Source: Global Footprint Network, National Footprint and Biocapacity Accounts 2019

### GREECE



Source: Global Footprint Network, National Footprint and Biocapacity Accounts 2019

### ROMANIA



Source: Global Footprint Network, National Footprint and Biocapacity Accounts 2019

In all EU countries shown above carbon is the primary component of their current Ecological Footprint. Sweden also boasts a high biocapacity reserve, primarily thanks to its forests and fisheries. At the same time, Sweden also displays a high forest-products Footprint. Overall, the country's per capita Ecological Footprint is higher than any of those shown here. It ranks fourth in the EU.



The evolution of these EU Member States' Ecological Footprints reflects historic economic trends – Belgium, France and Germany all experienced a peak in the 70s and 80s. The Ecological Footprint of almost all EU countries declined after the financial crisis in the late 2000s. This is especially noticeable for Greece, which was most affected by the economic crisis. Spain, Portugal and Italy experienced similar contractions. France's Overshoot Day shows 10 days of improvement between 2018 and 2019 as calculations were upgraded with more recent data. This is unfortunately not due to ecological transition but rather to extreme weather events. In 2016 France experienced adverse weather during spring and early summer. In some parts of the country, crops and pastureland were flooded for several weeks. These extreme weather events cut cereals and vegetable yields by 20% to 30%.

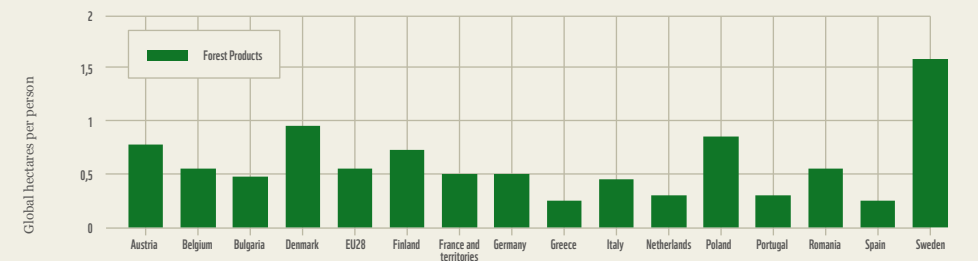
The steep decline in Romania's Footprint began in 1989, the same year as the Romanian Revolution. Many industrial and economic enterprises from the communist era were closed after 1989, mainly due to the emergence of economic restructuring and privatisation policies that characterise the transition to a market system. Romania's economy rapidly expanded in the early 2000s until the 2008 recession. These economic trends are reflected in Romania's carbon footprint, which dominates its Ecological Footprint.

The EU and its member states now have the opportunity to bring their Ecological Footprint in balance with the biological resources of our one planet by setting the right priorities and implementing the right policies – such as reaching climate neutrality well before mid-century and reversing biodiversity loss. Failing now to embark by design on the path to one-planet prosperity may lead to tumbling Ecological Footprints by disaster tomorrow. The choice before decision makers is clear.

Forests are particularly significant ecosystems because they provide services to local communities as well as to humanity at large. Not only do they harbour great biodiversity, but they play a significant role also in climate stability through storing and sequestering carbon, and in the water cycle. The forest Footprint takes into account timber, fuel wood and pulp but not consumption of agricultural commodities that can be linked to deforestation such as soy and palm oil – these are taken into account in the cropland and grazing land footprints.

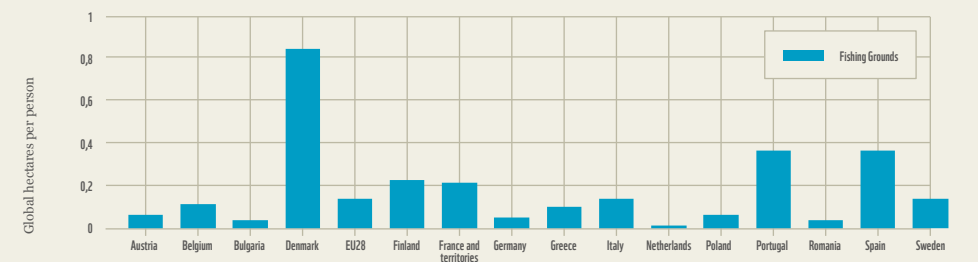
The data for the forest products and fishing Footprints include domestic production and imports, minus exports. These footprint components vary widely from EU country to country, due to different levels of domestic production and consumer demands.

### FOREST PRODUCTS FOOTPRINT OF EU MEMBER STATES IN 2016



Source: Global Footprint Network, National Footprint and Biocapacity Accounts 2019

### FISHING GROUNDS FOOTPRINT OF EU MEMBER STATES IN 2016



Source: Global Footprint Network, National Footprint and Biocapacity Accounts 2019

## THE IMPACT OF OUR ECOLOGICAL FOOTPRINT ON BIODIVERSITY

Carbon currently makes up 60% of the EU's Ecological Footprint. As the world's temperatures have already increased by about 1°C and Europe has already started to feel the impact. According to the European Environment Agency, floods, droughts, heatwaves and other climate-related extremes caused economic losses of €453 billion between 1980 and 2017, claiming the lives of more than 115,000 people across Europe<sup>4</sup>.

Climate change puts an immense strain on our ecosystems. Just one example is the coral bleaching caused by ocean acidification from warmer seas – yet nearly 200 million people depend on coral reefs to protect them from storm surges and waves<sup>5</sup>. Even if we can limit global warming to 1.5°C we will lose 70-90% of coral reefs, and at a 2°C virtually all will be lost. Coral reefs are home to a quarter of all marine species, which would mean a mass extinction event. With current insufficient political commitments, the world is about to reach 3.2°C global temperature rise.<sup>6</sup>

However, focusing strictly on greenhouse gas emissions will not be enough to tackle the EU's Ecological Footprint. Partly due to EU consumption of food and commodities, countries which were historically rich in biodiversity have seen their biocapacity collapse in recent decades. This is the case for example of Brazil whose Ecological Footprint increased in recent years beyond its biocapacity.

This phenomenon of EU demand driving depletion in other parts of the world can be linked to consumption of multiple commodities such as soy for animal feed (from Brazil, Argentina and Paraguay), of palm oil for food and especially biofuels (from Indonesia, Malaysia and Africa), or of cocoa (from e.g. Republic of Côte d'Ivoire and Ghana). This demand is linked to deforestation and conversion of natural ecosystems, which further exacerbate climate change by removing precious carbon sinks and biodiversity hotspots.

The 2018 WWF Living Planet Report shows that on average, we've seen a 60% decline in the size of wildlife populations in

FOCUSING  
STRICTLY ON  
GREENHOUSE GAS  
EMISSIONS  
WILL NOT  
BE ENOUGH TO  
TACKLE THE EU'S  
ECOLOGICAL  
FOOTPRINT

<sup>4</sup> <https://www.eea.europa.eu/data-and-maps/indicators/direct-losses-from-weather-disasters-3/assessment-2>

<sup>5</sup> WWF. 2018. Living Planet Report - 2018: Aiming Higher. Grooten, M. and Almond, R.E.A.(Eds). W WF, Gland, Switzerland.

<sup>6</sup> IPCC, 2018: Global Warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty [Masson-Delmotte, V., P. Zhai, H.-O. Pörtner, D. Roberts, J. Skea, P.R. Shukla, A. Pirani, W. Moufouma-Okia, C. Péan, R. Pidcock, S. Connors, J.B.R. Matthews, Y. Chen, X. Zhou, M.I. Gomis, E. Lonnoy, Maycock, M. Tignor, and T. Waterfield (eds.)]. World Meteorological Organization, Geneva, Switzerland



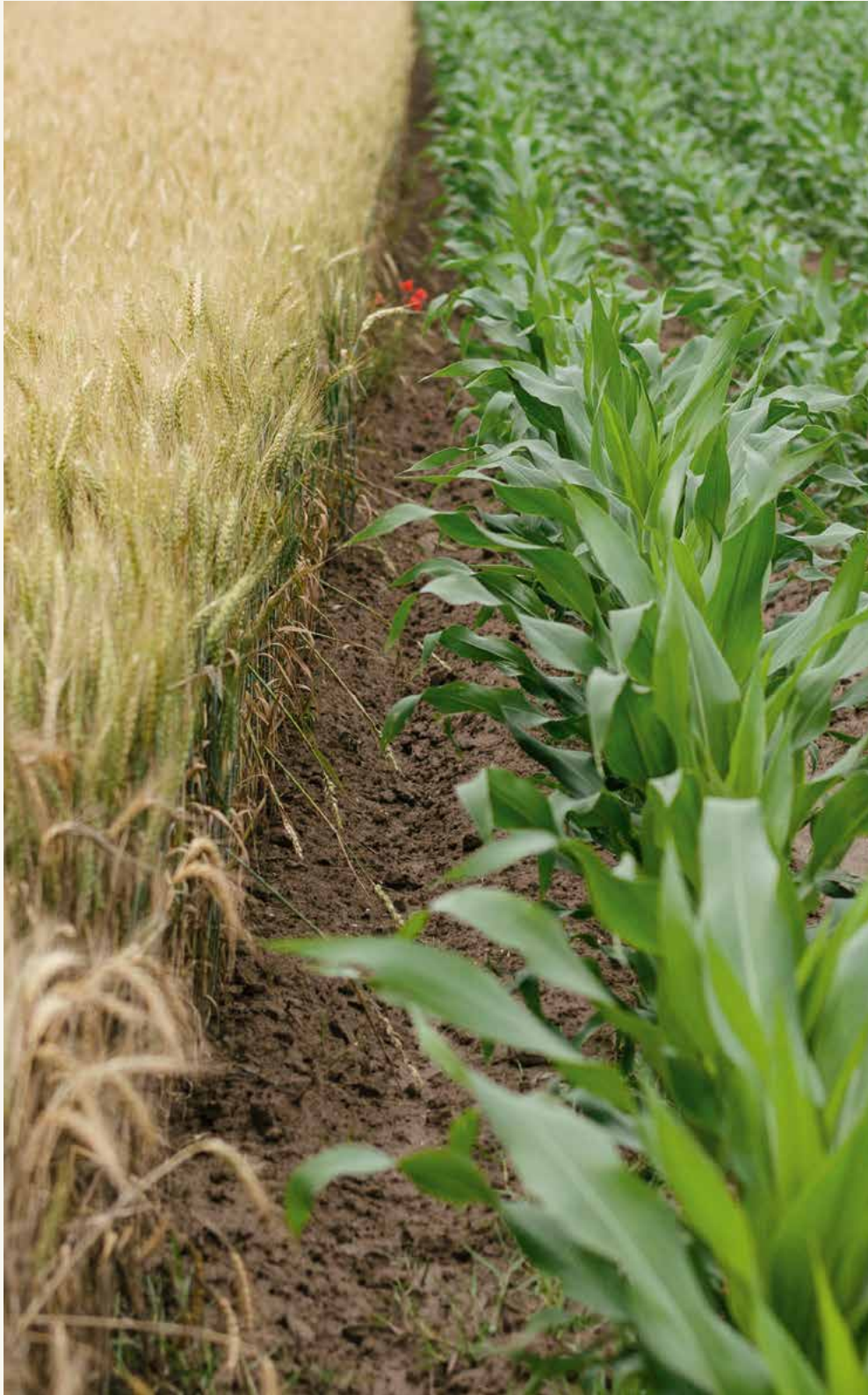
© Mauri Rautkari / WWF

just over 40 years. The top threats to species identified in the report link directly to human activities, including habitat loss and degradation and the excessive use of wildlife such as overfishing and overhunting.

### **A call for a New Deal for Nature and People**

Climate, nature and sustainable development issues are closely interlinked and cannot be addressed in silos. We have an unparalleled opportunity before us as we head into 2020, when the international community will review its progress on the Sustainable Development Goals (SDGs), including the goals related to nature, and take the next important step with the Paris Agreement as countries enhance and improve their nationally determined contributions. Next year will also present nations with the opportunity to strengthen the UN Convention on Biological Diversity (CBD). It will adopt a post-2020 biodiversity framework equipped with targeted, ambitious, and measurable objectives to mitigate the drivers of biodiversity collapse, as well as national actions by all countries to address the loss of nature which will, collectively, add up to deliver strengthened global targets.

A New Deal for Nature and People is needed to bring together these as yet disconnected efforts. This should be reflected in a strong endorsement by Heads of State in 2020 that strengthens global targets and mechanisms to reverse the loss of nature and to protect and restore natural ecosystems by 2030.



# WWF POLICY RECOMMENDATIONS: EUROPE AT A CROSSROADS

On 23-26 May 2019, Europeans will elect their representatives to the European Parliament. The outcome of these elections and the response from national and European leaders will determine the path that the EU chooses – either addressing the urgent climate and environmental crises or ceding leadership on these issues to other countries. The strategic orientation taken following the EU elections is an opportunity to tackle our Ecological Footprint, thus igniting a dynamic which would move the date of the EU’s Overshoot Day later in the year.

## THE STRATEGIC ORIENTATION TAKEN FOLLOWING THE EU ELECTIONS IS AN OPPORTUNITY TO TACKLE OUR ECOLOGICAL FOOTPRINT

For this to happen, a comprehensive approach which takes into account all aspects of the EU’s Ecological Footprint – carbon, forests, crop and grazing land, fishing and built-up land– as well as the interlinkages between them is needed. Such an approach will have benefits for our social and economic well-being, as failure to tackle climate change and environmental degradation are among the most likely and high impact threats facing the world – including Europe. Sustainable policies also have the potential to significantly boost the EU’s economy, through investments, faster innovation, cost savings and new jobs. The UN’s SDGs provides an essential framework in this regard. As set out in the European Commission’s Reflection Paper ‘Towards a Sustainable Europe by 2030’, the EU should adopt an overarching SDG strategy to guide all the actions of the EU and its Member States<sup>1</sup>. Through implementing policy coherence for sustainable development, the EU can make sure its policies aren’t being counterproductive towards its sustainable development commitments.

<sup>1</sup> Scenario 1, European Commission Reflection Paper ‘Towards a Sustainable Europe by 2030’

WWF calls on political representatives and EU leaders to take the following actions to decrease the EU's Ecological footprint and stay on track to achieving our international commitments:

1. Shift to sustainable consumption and food systems
2. Make Europe climate-neutral by 2040
3. Restore our nature
4. Protect the Ocean
5. Invest in a sustainable future

WWF has published a Call to Action to all EU leaders and elected representatives for a European Sustainability Pact, consisting of a comprehensive set of goals and actions to be taken in the next five years on climate change, nature protection and sustainable development<sup>2</sup>. These actions should be endorsed in the wake of the 2019 European elections by the European Parliament, European Commission and European Council.

### I. SHIFT TO SUSTAINABLE CONSUMPTION AND FOOD SYSTEMS

HALTING GLOBAL  
DEFORESTATION  
WOULD ACCOUNT  
FOR AT LEAST  
**30%**  
OF ALL MITIGATION  
ACTION NEEDED  
TO LIMIT CLIMATE  
CHANGE TO 1.5°C

The EU's forest products, grazing and cropland Footprints make up 34% of its total Ecological Footprint. This has an impact both within and outside Europe through trade and because carbon emissions and sequestration know no borders. Consumer demand drives land use choices, which in turn can lead to deforestation, forest conversion, and loss of biodiversity, disrupting habitats and species, and causing substantial carbon emissions.

Within the EU, unsustainable food production and farming practices are the biggest driver of biodiversity loss, while outside of our borders EU demand for commodities such as soy, palm oil and timber has a considerable impact on ecosystems. The EU must therefore urgently implement and expand/develop solutions to reduce consumption and waste, and make all its consumption sustainable.

<sup>2</sup> WWF Call to Action – A European Sustainability Pact for a safer, more competitive and responsible EU, October 2018

### WWF CALLS ON THE EU TO:

1. **Adopt and implement an EU Common Agricultural Policy (CAP)** which supports farmers in the transition towards fully sustainable food and agricultural systems, and better rewards farmers with higher environmental commitments and who deliver more public goods;
2. **Develop an ambitious action plan** that includes legislation on deforestation, forest degradation and conversion of natural ecosystems to address the impact of the EU's consumption beyond its borders.

### IT'S POSSIBLE

Recent trends show that a myriad of business and citizen-led initiatives are starting to make food and farming systems more sustainable<sup>1</sup>.

- In 2018, 65 of the world's largest food companies committed to working to halt deforestation in the Cerrado<sup>2</sup>. The Cerrado covers a quarter of Brazil and is one of the world's most important ecosystems, home to 5% of the planet's biodiversity. Unfortunately, however, the Cerrado continues to lose ground to expanding beef and soy production, plus other commodities and infrastructure. This commitment sends a critical signal to producers, processors, and traders that the Cerrado is as vital to our planet as the Amazon.
- The total organic area in the EU-28 in 2017 was 12.6 million hectares (ha), an increase of 25% since 2012. In France, which has the EU's largest agricultural input, organic farming covered 1.5 million hectares of agricultural land in 2017, a progression of 17% compared to the previous year. Public authorities should seize the opportunity to implement supportive public policies to foster and upscale this transition.

**6.5**  
**MILLION**  
HECTARES OF  
FOREST DISAPPEAR  
EACH YEAR  
GLOBALLY, MAINLY  
DUE TO LAND  
CONVERSION FOR  
AGRICULTURE,  
URBAN  
DEVELOPMENT,  
INFRASTRUCTURE  
EXPANSION  
AND MINING\*

\* FAO. State of the World Forests. (UN Food and Agriculture Organization, Rome, Italy, 2016)

<sup>1</sup> WWF report : 10 signaux prouvant que la transition agricole et alimentaire a commencé  
<sup>2</sup> <https://www.worldwildlife.org/stories/saving-the-cerrado-brazil-s-vital-savanna>

## II. MAKE EUROPE CLIMATE-NEUTRAL BY 2040

The impacts of climate change can be felt all over the world, and Europe is no exception: 2018 was a record year in Europe for drought and forest fires. Carbon is the biggest component of the EU's Ecological Footprint, representing 60%. Taking swift action to reduce the amount of carbon the EU is emitting would therefore have a considerable positive impact on the EU's Footprint.

### #MOVETHEDATE:

REACHING ZERO NET CO<sub>2</sub> EMISSIONS WOULD PUSH BACK THE EU OVERSHOOT DAY BY 153 DAYS.

The Paris Agreement, adopted by the global community in 2015, commits governments to keeping temperature rise to well below 2°C and aim towards 1.5°C. EU leaders and political representatives, however, have not yet taken the appropriate actions to live up to their commitments: the EU's current targets and global efforts are not ambitious enough to meet this goal, and will lead to an increase of 3°C by the end of this century.

### WWF CALLS ON THE EU TO:

1. **Fully implement the Paris Agreement** and limit global temperature rise to 1.5°C, in particular by committing to reach climate neutrality by 2040 and by developing and implementing a legislative framework to achieve a zero net emissions objective within the Union;
2. **Revise the EU's climate and energy 2030 targets upwards**, in line with the net zero by 2040 objective and in order to achieve a just transition towards a fully renewable and efficient energy system.

### IT'S POSSIBLE

Scotland has shown it's possible to lead the way on climate and renewable energy: it has reduced its emissions by 49% since 1990 and most of its electricity needs can now be met from renewable sources. Data from the Department for Business, Energy and Industrial Strategy shows that in 2018, the equivalent of almost three quarters of Scotland's annual gross electricity consumption came from renewable sources, a record high. The equivalent figure for 2010 was just 24%, showing that with the right investment, renewables can grow rapidly to meet a large part of consumer demand.

FULLY IMPLEMENTING THE PARIS AGREEMENT COULD CREATE **2 MILLION** NEW JOBS IN EUROPE AND SAVE 200 BILLION EUROS IN HEALTHCARE COSTS EVERY YEAR.



## III. RESTORE NATURE

According to the Living Planet Index<sup>3</sup>, global wildlife populations have declined by 60% since 1970, largely due to threats and pressures linked to human activity, such as habitat loss and degradation. Environmental degradation and biodiversity loss also impact human health, well-being and prosperity. The EU's goal to halt biodiversity loss by 2020<sup>4</sup> most likely won't be met, according to the latest indicators.

In 2020, there will be a new opportunity for the global community to come together to halt and reverse biodiversity loss, as a new 10-year strategic plan for biodiversity under the UN Convention on Biological Diversity (CBD) will be agreed upon. The EU should show the way and spearhead efforts to establish a New Deal for Nature and People. This should be reflected in a strong endorsement by Heads of State in 2020 that strengthens global targets and mechanisms to reverse the loss of nature and to protect and restore nature by 2030.

<sup>3</sup> W WF. 2018. Living Planet Report - 2018: Aiming Higher. Grooten, M. and Almond, R.E.A. (Eds). W WF, Gland, Switzerland.

<sup>4</sup> European Environment Agency, Environmental indicator report 2018 — In support to the monitoring of the Seventh Environment Action Programme



In the EU, strong laws exist to protect nature, but these are undermined by a chronic lack of investment and the poor integration of environmental considerations in the policies covering the sectors that are driving biodiversity loss, such as agriculture and energy infrastructure.

#### WWF CALLS ON THE EU TO:

- 1. Play a leading role in the endorsement by world leaders** of an ambitious New Deal for Nature and People in 2020 that strengthens global targets and mechanisms to halt and reverse the loss of nature by 2030;
- 2. Fully implement the existing EU legal framework** on protecting habitats, species and freshwater ecosystems in the EU.

EACH YEAR,  
ECOSYSTEMS  
PROVIDE SERVICES  
WORTH AROUND  
**US\$125**  
**TRILLION**  
TO THE GLOBAL  
ECONOMY THROUGH  
DRINKABLE WATER,  
FOOD, FRESH AIR,  
HEAT ABSORPTION,  
PRODUCTIVE SOIL,  
AND CARBON  
SEQUESTRATION  
OF FORESTS AND  
OCEANS

#### IT'S POSSIBLE

The Birds and Habitats Directives (or Nature directives) are the cornerstone of nature protection in the EU, offering protection to threatened species and habitats throughout the EU and creating the world's biggest network of protected areas. One of the legislation's biggest success stories is the recovery of large carnivore populations, including wolves, bears, lynxes and wolverines and which had entirely disappeared from some EU countries by the 20th century.

Thanks to two decades of protection under the EU Habitats Directive, Europe's large carnivores have seen a remarkable revival, and one or more species are now present in all continental EU countries, except for Luxembourg. This recovery shows that investment in nature conservation and cooperation between many different stakeholders pays off. However, despite the fact that large carnivores are recovering, many populations remain threatened, due to habitat loss and degradation, and poaching.

#### IV. PROTECT THE OCEANS

**2/3**  
OF EUROPE'S  
ASSESSED FISH  
STOCKS ARE  
OVEREXPLOITED

Oceans are a source of livelihoods, food, and well-being for billions of people around the world. However, despite significant progress in the governance of Europe's seas, our global oceans are in crisis. Decades of overfishing and unsustainable fishing practices have pushed fish stocks to the edge of collapse, while destruction of marine habitats, climate change, plastic pollution and illegal activities threaten oceans globally.

The EU's Ecological Footprint encompasses both its demand on international waters as well as its impact on European seas. The EU is the largest seafood market in the world, importing more than 60% of its seafood, while the Mediterranean is the most overfished sea in the world, with 62% of assessed fish stocks at risk of being depleted. And yet, while the EU is not achieving sustainable use of its seas, it has the right policy framework, knowledge and expertise to do so<sup>5</sup>.

<sup>5</sup> 2015 'State of European Seas' report by the European Environment Agency

THE NORTH SEA  
YIELDS ONLY  
**1/5<sup>TH</sup>**  
OF THE COD,  
PLAICE AND SOLE  
IT DID 25  
YEARS AGO

ILLEGAL FISHING  
ACTIVITY  
IS THOUGHT TO BE  
WORTH BETWEEN  
**US\$10-23**  
**BILLION**  
PER YEAR

#### WWF CALLS ON THE EU TO:

1. **Fully implement the EU legal framework** designed to sustainably manage the use of the seas and the protection of marine wildlife and habitats;
2. **Adopt and implement control and monitoring rules** to ensure that all fishing activities carried out by the EU fleet, and all seafood products entering in the EU market, are legal and environmentally sustainable.

#### IT'S POSSIBLE

In the last decade, the EU has become the strongest international actor in the fight against illegal fishing. Illegal fishing undermines all attempts to manage fish stocks sustainably, and it has serious implications for the health of marine ecosystems, food security and the livelihoods of people living in coastal communities.

Thanks to ambitious legislation that introduces controls on imported seafood products and sets out a system of trade sanctions, the EU is driving improvements in fisheries governance worldwide. Now, the EU needs to keep pushing for more transparency in the international fisheries value chain with the development of digital traceability tools to avoid frauds while simultaneously reinforcing control and deterrent sanctions.

#### V. FINANCING OUR SUSTAINABLE FUTURE

Sustainable economies are resilient economies that provide a better quality of life for all within the ecological limits of the planet. In recent years, sustainable economy sectors have grown significantly in Europe – despite reduced incentives and investments in the sustainable economy leading to slower job creation and weakened competitiveness in key sectors such as renewable energy and sustainable transport.



© Global Warming Images / WWF

BETWEEN 2000 AND  
2005, THE GROWTH  
RATE OF GREEN JOBS  
WAS **SEVEN**  
TIMES HIGHER THAN  
THOSE IN THE REST  
OF THE ECONOMY

By boosting investments in the sustainable economy, the EU can increase the competitiveness and job potential of European investors and lead in the sectors that will be at the heart of tomorrow's economy. Progressive businesses, cities, regions and investors have already started to show what's possible: in the past decade, the environmental economy in Europe has grown faster in both value added and employment than the overall economy and it has been more resilient to economic shocks<sup>6</sup>.

The EU now needs to step up both public and private finance for the transition towards a sustainable economy. With its Sustainable Finance Action Plan, the European Commission has shown leadership, but there is still a way to go to ensure its ambition is achieved and fully implemented.

<sup>6</sup> Environmental economy – statistics on employment and growth', Eurostat, consulted on 13/03/2019 at [https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Environmental\\_economy\\_%E2%80%93\\_statistics\\_on\\_employment\\_and\\_growth](https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Environmental_economy_%E2%80%93_statistics_on_employment_and_growth)

EUROPEAN  
TAXPAYERS  
SUBSIDISE THE  
FOSSIL FUEL  
INDUSTRY  
TO THE TUNE  
OF **112**  
**BILLION**  
EUROS EVERY  
YEAR

## IT'S POSSIBLE

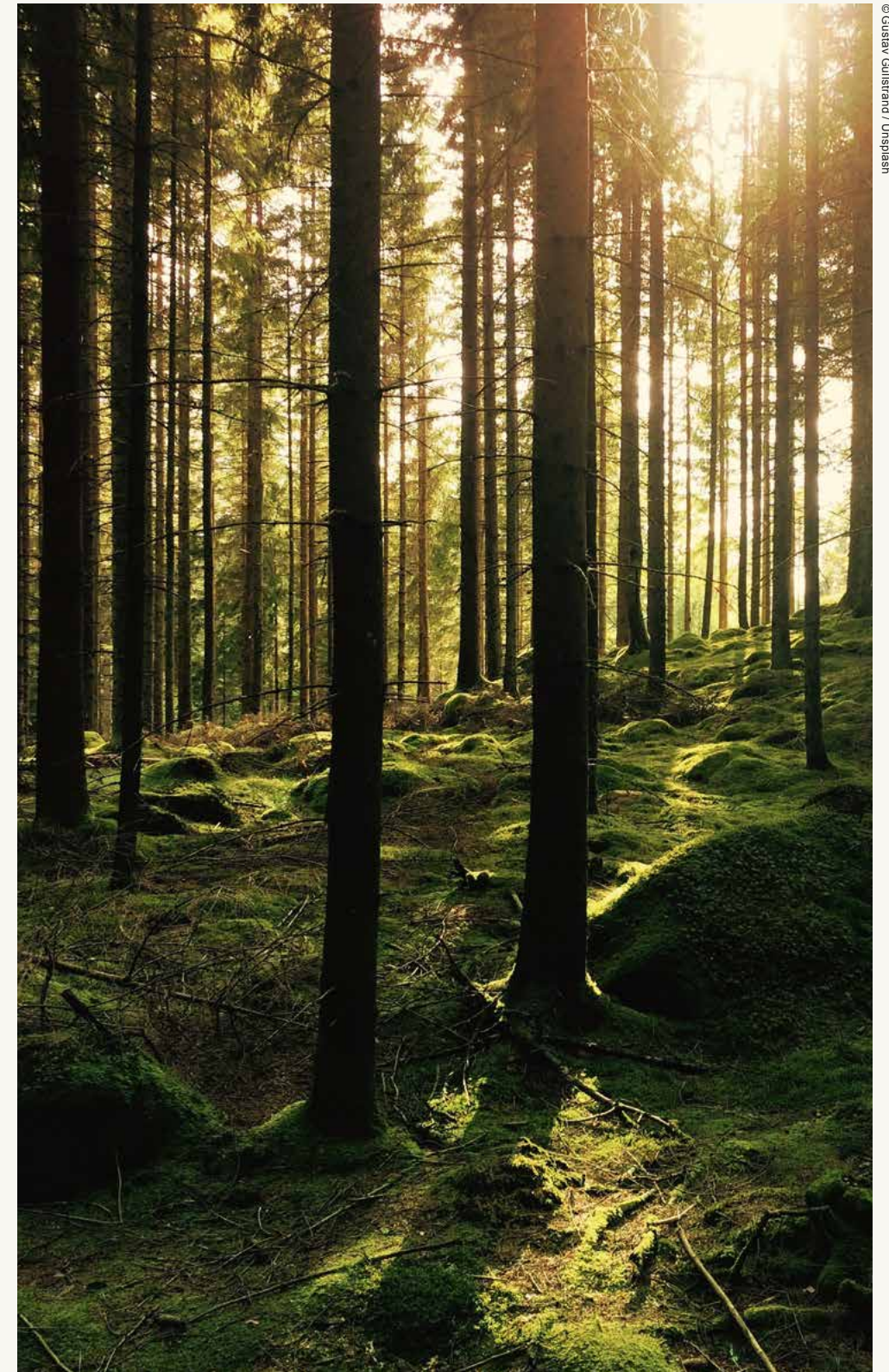
Thanks to its 2018 Sustainable Finance Action Plan, the EU is a frontrunner in driving sustainability in the financial sector. Several pieces of legislation have since been adopted, which include requirements for banks start disclosing their climate and environmental risks as from 2022, requirements for large investors to disclose the financial impact of the environmental and social risks they face as well as the environmental and social impacts of their investments for all their financial products.

Further legislation mandates the European financial regulators – the Supervisory Authorities (ESAs) – to draw up a methodology to assess the impact of environmental risks on the stability of Europe's finance institutions. These achievements show that when political will is applied to an issue, fast, world-leading action can be taken by the EU on climate and sustainability.

Before the end of 2019, the EU also has the opportunity to ensure its budget for the next seven years is in line with commitments under the Paris Agreement, the SDGs and the UN Convention on Biological Diversity. At least half of the budget should be spent on climate and nature, and environmentally harmful subsidies should be phased out completely.

### WWF CALLS ON THE EU TO:

- 1. Make the EU a world-class sustainable economy** by completing the reform of the finance sector launched under the Juncker Commission in order to channel investments towards the green economy;
- 2. Adopt and implement an EU budget** of which at least 50% is invested in the sustainable blue and green economies, in line with the 1.5°C target of the Paris Agreement; and ensure the remainder is “climate and environment proof” – i.e. does not exacerbate climate change and environmental degradation.



## GLOSSARY

The **Ecological Footprint** measures the amount of biologically productive land and sea area required to produce all the resources a population consumes and to absorb its waste. The Ecological Footprint takes every year's technological advances into account.

**Biocapacity** is the biologically productive area that provides renewable biological capacity, i.e., the ability of an ecosystem to regenerate biological resources and absorb wastes generated by humans.

**Ecological overshoot** occurs when human demand exceeds the regenerative capacity of a natural ecosystem. Global overshoot occurs when humanity demands more than what the biosphere can renew. In other words, humanity's Ecological Footprint exceeds what the planet can regenerate. The biosphere's renewable capacity includes the replenishment of resources and the absorption of waste, such as carbon dioxide from fossil fuel.

**Earth Overshoot Day** marks the date when humanity's demand for ecological resources (fish and forests for instance) and services in a given year exceeds what Earth can regenerate in that year. Humanity grows this deficit by liquidating stocks of resources and accumulating waste, primarily carbon dioxide in the atmosphere. Andrew Simms originally conceived the concept of Earth Overshoot Day while working at the UK think tank New Economics Foundation.

**Global hectares** are hectares of biologically productive land and sea area with world average bioproductivity. Both biocapacity and the Ecological Footprint are measured in global hectares. A hectare contains 10,000 square meters and corresponds to about 2.47 acres.

## WHAT IS FOOTPRINT ACCOUNTING?

- The Ecological Footprint is derived by tracking how much biologically productive area it takes to provide for all the competing demands of people. These demands include space for food growing and fibre production, timber regeneration, absorption of carbon dioxide emissions from burning fossil fuels, and accommodating built infrastructure. The sum of these demands makes up the Ecological Footprint. A country's consumption is calculated by adding imports to and subtracting exports from its national production.
- All commodities carry with them an embedded amount of bioproductive land and sea area necessary to produce them and sequester the associated waste. International trade flows can thus be seen as flows of embedded Ecological Footprint.
- The Ecological Footprint uses yields of primary products (from cropland, forest, grazing land and fisheries) to calculate the area necessary to support a given activity.
- Biocapacity is measured by calculating the amount of biologically productive land and sea area available to provide the resources a population consumes and to absorb its wastes, given current technology and management practices. To make biocapacity comparable across space and time, areas are adjusted proportionally to their biological productivity. Biocapacity is expressed in "global hectares". Countries differ in the productivity of their ecosystems, and this is reflected in the Footprint accounts.
- Results from this analysis shed light on a country's ecological impact. A country has an ecological reserve if its Footprint is smaller than its biocapacity; otherwise it is operating with an ecological deficit.
- Today, most countries, and the world as a whole, are running ecological deficits. In fact, today over 85% of the world population lives in countries with an ecological deficit. The world's ecological deficit is referred to as global *ecological overshoot*.

For more background information, visit [www.footprintnetwork.org](http://www.footprintnetwork.org)  
For all country data, visit [data.footprintnetwork.org](http://data.footprintnetwork.org)

# WWF IN EUROPE



**1989**

WWF European Policy Office was founded in Brussels in 1989

**80%**

Up to 80% of national environmental legislation is decided by the EU



**27 countries**

WWF is present in 27 countries in Europe, including 24 in the EU

**+6M**

WWF has over 6 million followers on social media



**Why we are here**

To stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature.

[wwf.eu](http://wwf.eu)