

European Green Deal: measures addressing climate policies

DIS – Study Abroad in Scandinavia

April 6, 2020

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The views expressed are those of the author and may not in any circumstances be regarded as stating an official position of the European Environment Agency or its Management Board.

The EEA mission

“The EEA aims to support sustainable development and to help achieve significant and measurable improvement in Europe’s environment through the provision of timely, targeted, relevant and reliable information to policy makers and the public.”

Established by EC Regulation in 1990 and since 1994 operational, located in Copenhagen/Denmark; approx. 200 employees



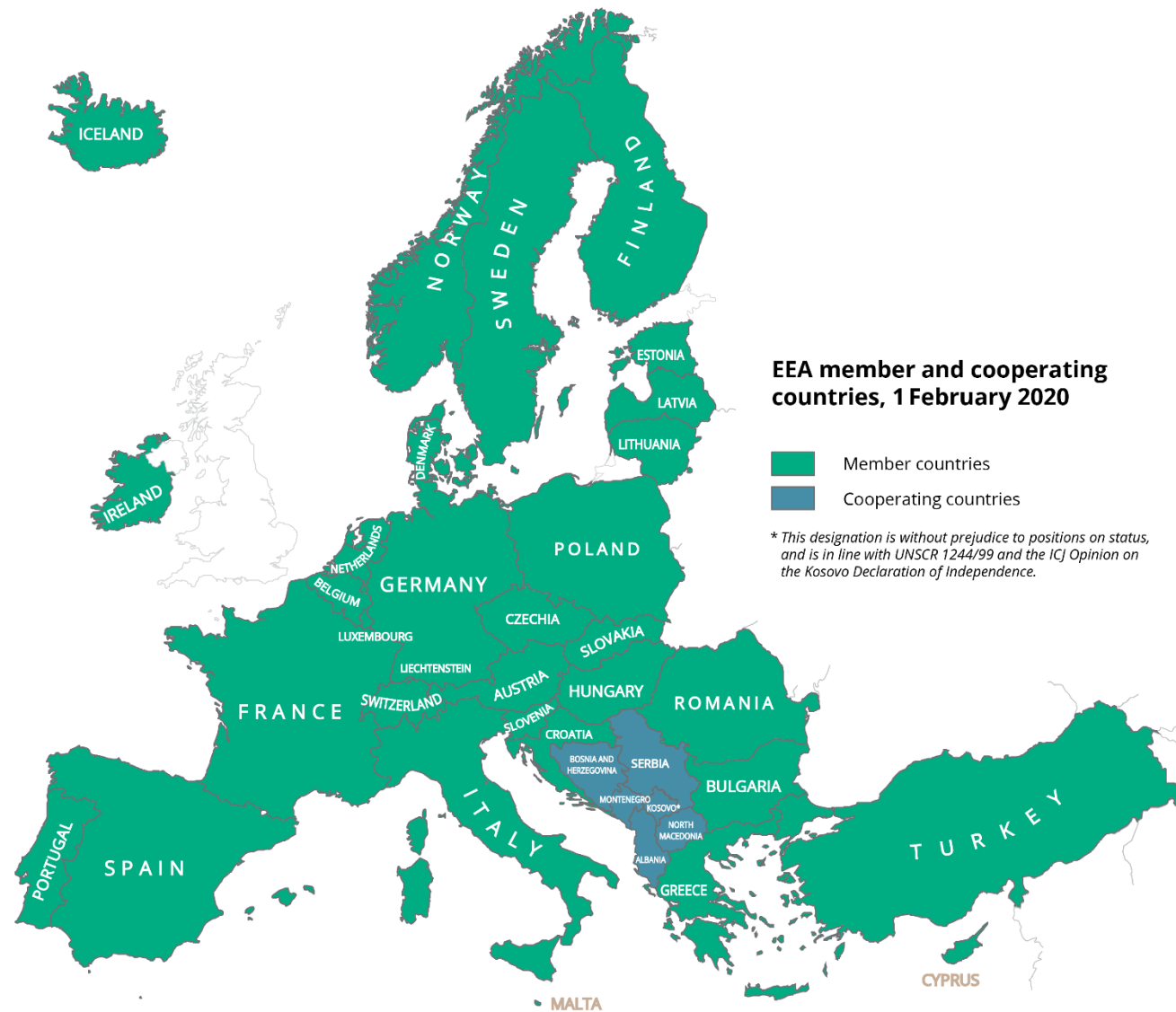
The EEA is...

- An independent EU agency
- Analysing, assessing and providing information
- An interface between science and policy
- Dependent upon strong networks to carry out its work

The EEA is not ...

- Formulating or proposing new legislation
- An executive body implementing environmental measures
- A funding body

Which are the EEA member and collaborating countries?



European Green Deal

July 2019 – Ursula von der Leyen presented her vision /plan:

The Political Guidelines focus on six headline ambitions for Europe over the next five years and well beyond:

- ✓ *A European Green Deal*
- ✓ *An economy that works for people*
- ✓ *A Europe fit for the digital age*
- ✓ *Protecting our European way of life*
- ✓ *A stronger Europe in the world*
- ✓ *A new push for European democracy*



European Green Deal

Von der Leyen's political guidelines (2019): My agenda for Europe

I want Europe to strive for more by being the first climate-neutral continent.

I will propose a European Green Deal in my first 100 days in office.

Publication of the **Communication on the European Green Deal** on 11.12.2019: 11 days after the Commission was in office.

- *The European Green Deal (EGD) is a policy action plan*
- *The EGD is probably closer to a collection of policies than a strategy. These policies are individually ambitious: the climate law for instance provides grounds to put climate into the mainstream of all EU policy areas.* (source: <https://www.e3g.org/library/european-green-deal-its-a-reset>)

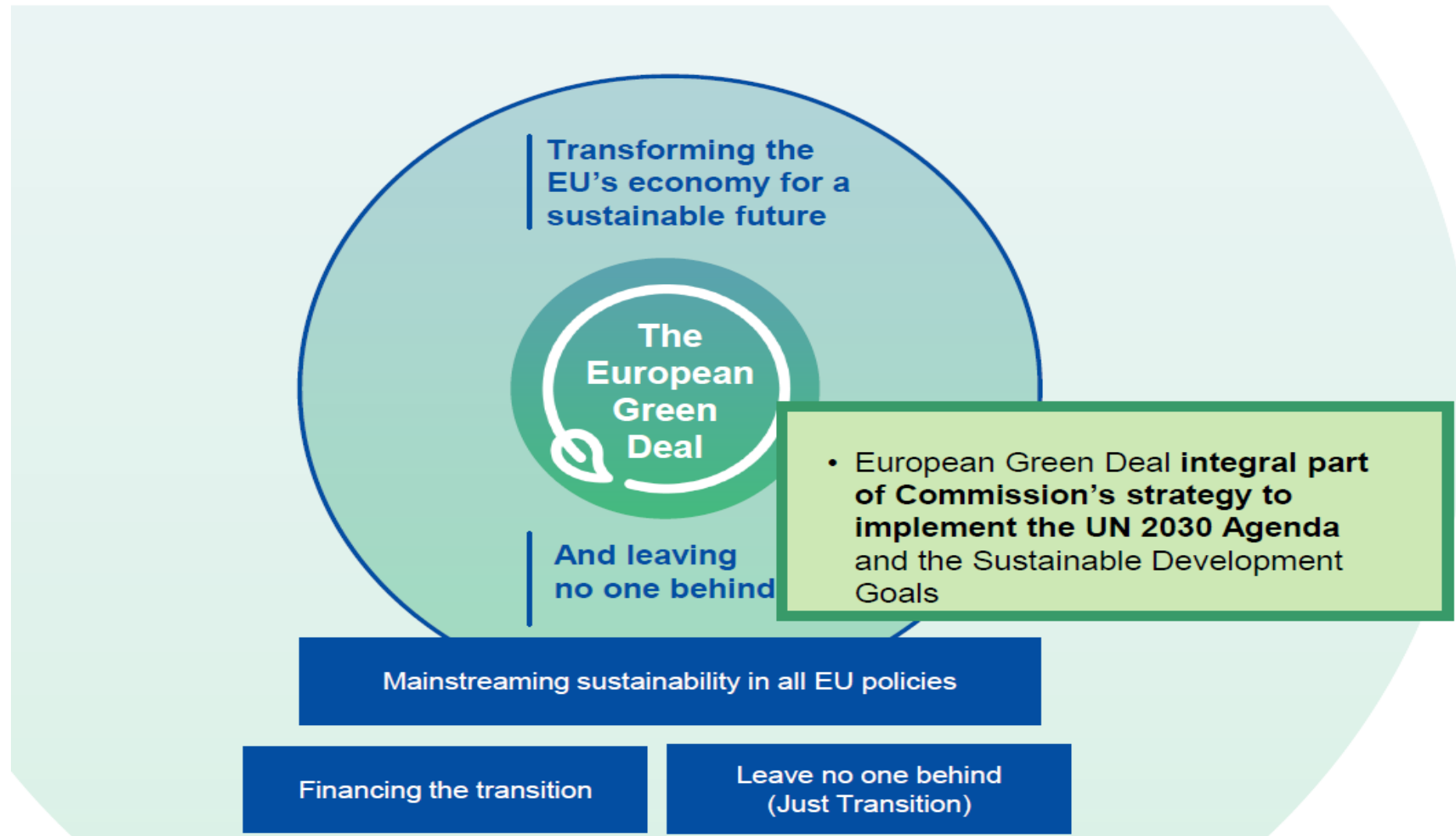
The European Green Deal



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The European Green Deal



European Green Deal

The EU is setting out its European Green Deal, a massive overarching strategy encompassing all aspects of the European economy

The European Green Deal is a response to these [climate and environmental-related] challenges.

- **new growth strategy**
 - → lead to net zero emissions by mid-century (no net emissions of greenhouse gases in 2050)
 - → a modern, resource-efficient and competitive economy
 - → economic growth is decoupled from resource use.
- It puts **sustainability** – in all of its senses – and the **well-being of citizens** at the centre of our action - bringing together four dimensions: environment, productivity, stability and fairness.

EC refers in the Annual Sustainable Growth Strategy (ASGS) of a **paradigm shift in EU economic policy**. It points out that economic growth is not an end in itself and that an economy must work for the people and the planet.

(The **European Semester** (ES) is a multi-annual exchange/discussion between the European Commission and Member States to achieve the **EU's** targets, both in terms of the **Europe 2020** Strategy and of the Stability and Growth Pact – introduced in 2010)

European Green Deal and Green Deal (USA)

In March 1933, the President of the United States Franklin Delano Roosevelt pushed his country into an unprecedented program of economic regulation, social protection and public investment. From this “first New Deal”, Roosevelt was mindful of the need to articulate the **imperative of social progress** to the **emerging challenge of environmental protection**.

This social and ecological nexus is the core of the bill for a “Green New Deal” presented in February 2019 by Alexandria Ocasio-Cortez and colleagues in the US House of Representatives.

The Green New Deal (GND) resolution calls upon the federal government to create a comprehensive set of policies and programmes that would simultaneously address the **climate and inequality crises**.

European Green Deal and Green New Deal (USA)

The GND is a programme to achieve **net zero greenhouse gas emissions** and a range of other environmental goals (from clean water to healthy food) through a **10-year programme** of investment and job creation.

The resolution lists fourteen areas which require government action. These include the repair and upgrading of infrastructure (including 100% renewable and zero-emission power), upgrading the energy efficiency of all buildings, growth in clean manufacturing, the reduction of emissions from agriculture, overhauling transportation systems (including zero-emission vehicles and accessible public transit), restoring and protecting threatened ecosystems and cleaning up hazardous waste sites.

In doing this, the resolution aims to **create 'millions' of jobs**. But not just any old jobs: they must be **'high-quality union jobs that pay prevailing wages'**, and the economic change required must be managed through a **'fair and just transition for all communities and workers'**. (<http://speri.dept.shef.ac.uk/2019/06/26/what-exactly-is-the-green-new-deal/>)

European Green Deal and Green New Deal (USA)

Similarities / differences

- Environment / climate challenge
- Big investments
- Social – ‘leaving no one behind’ (EGD)
- Social – create millions of high quality jobs (US New Deal)
- Time frame (net zero GHG emissions): 2050 (EGD) versus 2030 (US Green New Deal)
- Linking to Sustainable Development Goals (EGD)

European Green Deal – in the context of ‘Coronavirus’

“Non-essential” initiatives like the **biodiversity strategy** and the **farm-to-fork strategy** are to be delayed by a few weeks. According to the Commission’s work programme, to be adopted before the end of March. Other Green Deal-related initiatives likely to be delayed include the **raw materials strategy**.

There are calls for abandoning EGD - Europe should “forget about the Green Deal” to focus on the coronavirus, (Czech Prime Minister Babis) as well as the carbon trading scheme should be put on hold, (Deputy Minister for State Assets , Poland): EC rejects these proposals!

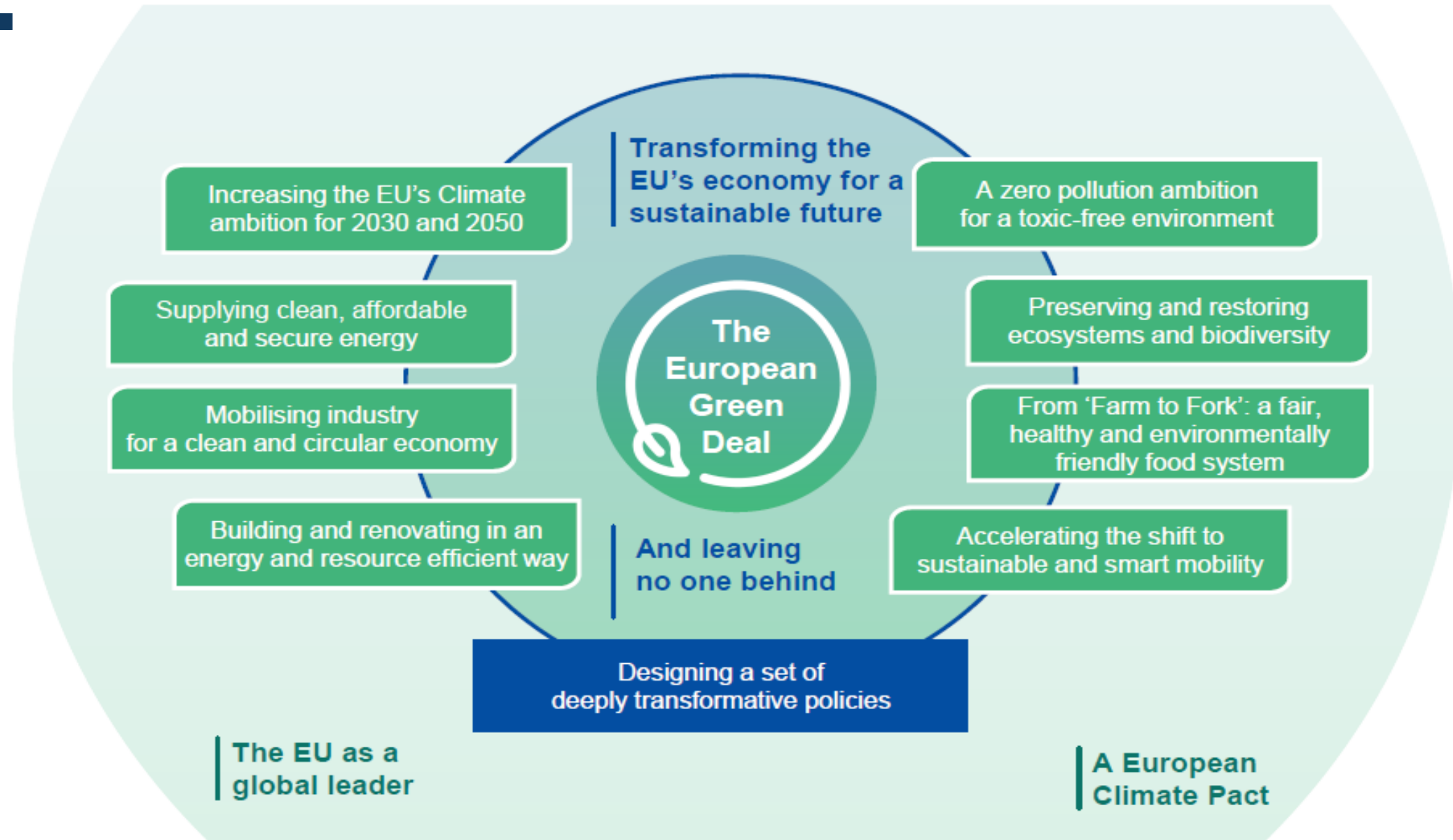
Carbon prices lost as much as 25% (as of end of March 2020) since the beginning of this year as the outbreak of the coronavirus reduced industrial output and energy use - with the lower price reflecting the broader economic slowdown and lower carbon emissions.

The EU should not give up on its plan to earmark a quarter of its next seven-year budget, known as the Multiannual Financial Framework 2021-2027, for climate-related activities – statement from the political office of Commission Executive Vice-President Frans Timmermans (in charge of implementing EGD).

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Increasing the EU's Climate
ambition for 2030 and 2050

- European '**Climate Law**' enshrining the 2050 climate neutrality objective in legislation by March 2020
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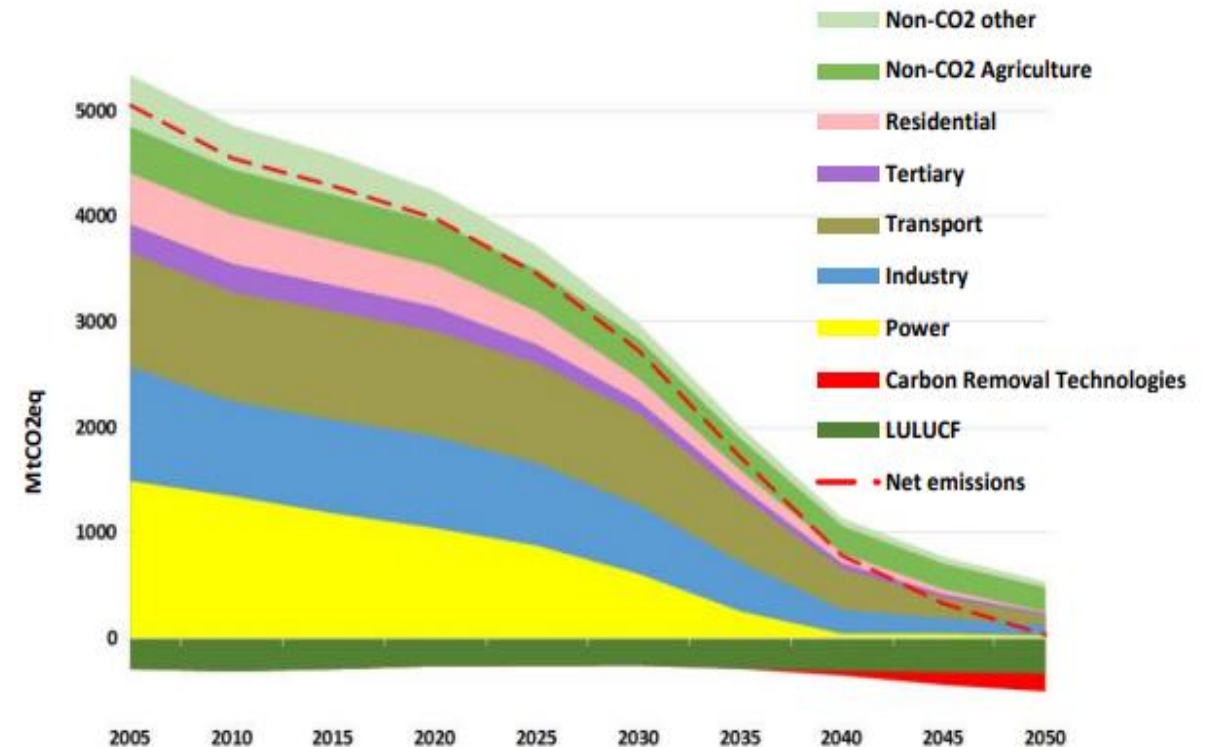
Climate Law - climate/energy targets – Europe

The **EU aims to be climate-neutral by 2050** – an economy with net-zero greenhouse gas emissions. This objective is at the heart of the European Green Deal and in line with the EU's commitment to global climate action under the Paris Agreement.

European Climate Law (4 March 2020) - proposal COM(2020)80final

- ✓ *current policies are expected to only reduce greenhouse gas emissions by 60% by 2050 compared to 1990 levels, meaning that much more remains to be done.*
- ✓ *The Commission will present an impact assessed plan to increase the 2030 target to at least 50% and towards 55% compared to 1990 levels*

Climate 'Transition' must have a destination



Source: Climate Bond Initiative (webinar 26 March 2020)

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Climate Law - climate/energy targets – Europe

The **2020 package** sets three key targets:

- 20% cut in **greenhouse gas** emissions (from 1990 levels)
- 20% of EU energy from **renewables**
- 20% improvement in **energy efficiency**

Current situation regarding the 2020 targets:

EEA findings: data from Member States indicate that the EU's total emissions decreased by 2.0 % in 2018, bringing the total reductions to 23.2% below 1990 levels (December 2019)

EEA findings: 'in reach' share of renewables was 18.0 % in 2018

EEA findings: the 2020 energy efficiency target appears increasingly difficult

The **2030 climate and energy framework** includes EU-wide targets and policy objectives for the period from 2021 to 2030. Key targets for 2030:

- At least 40% cuts in **greenhouse gas emissions** (from 1990 levels)
- At least 32% share for **renewable energy**
- At least 32.5% improvement in **energy efficiency**

GHG reduction – Denmark's 2030 target

Denmark's new policy target : a 70% reduction in 2030

So far Denmark has reduced emissions by 38% compared with 1990 and is on track, with currently passed legislation, to achieve a 45% reduction by 2030

Using existing technology, Denmark could achieve a 60% reduction emissions by 2030, the council said, but the remaining 10% would come from new technological advances.

According to the Danish Council on Climate Change (independent advisor to the government):

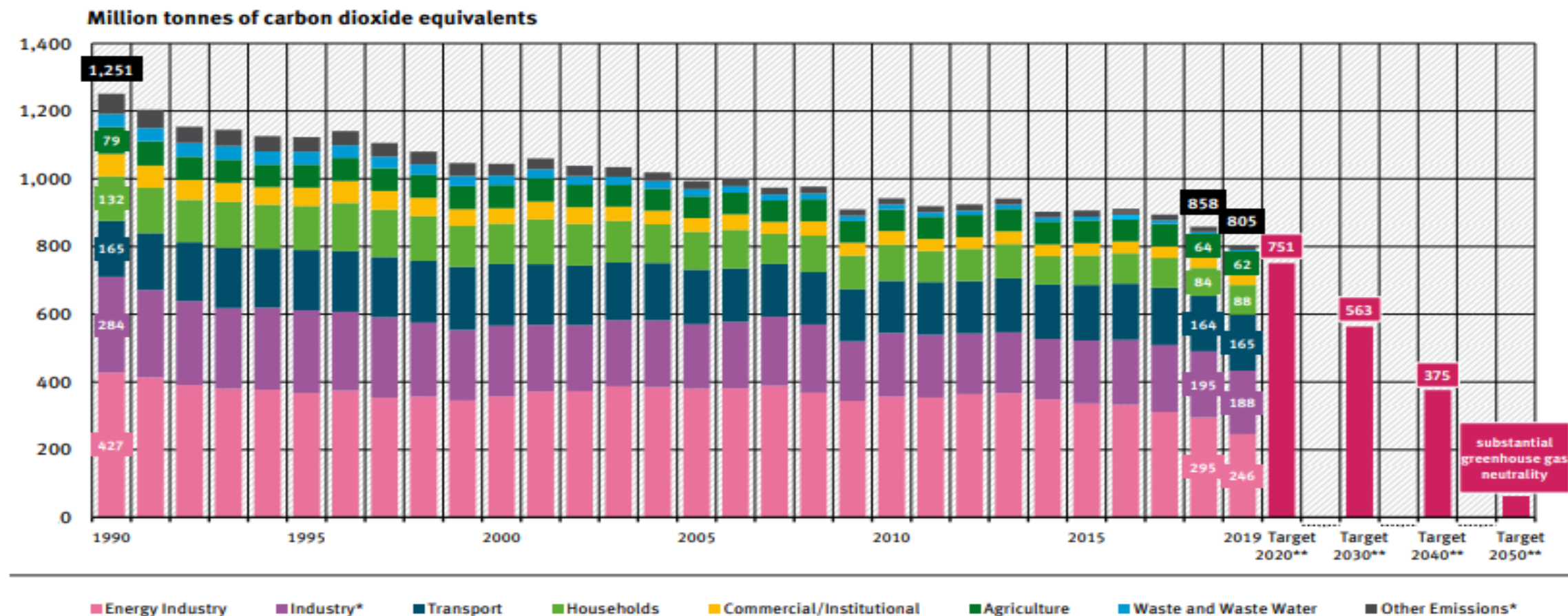
The most important tool would be an increase in the carbon tax and recommended an increase to 1,500 DKR per ton of CO₂equivalent, from just 170 DKR/ton CO₂ currently

What does it mean in terms of carbon tax levied on petrol?

currently 0.4 DKR/litre (0.05 EUR/litre) to 3.5 DKR/litre (0.47 EUR/litre) → an increase by a factor of 8.6

GHG reduction – Germany's 2030 target

Emission of greenhouse gases covered by the UN Framework Convention on Climate



Emissions by UN reporting category, without land use, land use change and forestry

* Industry: Energy and process-related emissions from industry (1.A.2 & 2);

Other Emissions: Other combustion (rest of CRF 1.A.4, 1.A.5 military) & fugitive emissions from fuels (1.B)

** Targets 2020 to 2050: Energy Concept of the German Federal Government (2010)

2019: Short-term forecast, emissions from commerce, trade & services contained in Other Emissions

Source: German Environment Agency, National Inventory Reports for the German Greenhouse Gas Inventory 1990 to 2018 (as of 12/2019) and estimate for 2019 from UBA Press Release 15th of march 2020



GHG reduction – Germany's targets

GHG reduction targets of Germany

- 2020: by 40% compared to 1990 levels
- 2030: by at least 55 % compared to 1990 levels
- 2040: by at least 70 % compared to 1990 levels
- 2050: substantial greenhouse gas neutrality

→ increase in annual reduction over time (1.7% (1990-2020); 2.8% (2020-2030); 4% (2030-2040); approx. 15% (2040-2050)*

Sectoral reduction targets in 2030 (compared to 1990 levels):

Energy industry: -62/61% -- reduction in 2019: 42%

Industry: -51/49% -- reduction in 2019: 34%

Transport: -42/40% -- reduction in 2019: 0%

Agreed policies – implemented over time:

- Phase out of coal / energy transition (*Energiewende*)
- Carbon pricing scheme to be introduced in 2021

GHG reduction target - Canada

TABLE 1: CANADA'S CHANGING TARGETS

Year Target was Set	Target	Base Year Emissions (Mt CO ₂ e)	Projected Emissions Target (Mt CO ₂ e)
1988	20% below 1988 levels by 2005	588*	470 in 2005*
1990	Remain at 1990 levels by 2000	590	590 in 2000
1993	20% below 1988 levels by 2005	588*	470 in 2005*
1995	66Mt below 1995 levels by 2010	640	574 in 2010
1998	49Mt below 1998 levels by 2010	677	628 in 2010
2002	6% below 1990 levels by 2012 ⁷	590	555 in 2012
2007	20% below 2006 levels by 2020 ⁸	719	575 in 2020
2010	17% below 2005 levels by 2020 ⁹	731	607 in 2020

Source: National Round Table on the Environment and the Economy
<http://nrt-trn.ca/chapter-2-canadas-emissions-story>

- The World Conference on the Changing Atmosphere; Implications for Climate Change Toronto, Canada (27-30 June 1988). The **Toronto Agreement** (1988) aimed to cut CO₂ emission levels by 20 per cent by the year 2005, using 1988 as a base level. ... Forecasts at that time were predicting a 3C rise in global temperatures by 2030 due to anthropogenic greenhouse gas emissions
- **Kyoto target** (2002): The target for Canada was to reduce its GHG emissions by 6 per cent from 1990 levels between 2008 and 2012. (Canada withdrew from Kyoto in 2011).
- Under the **Paris Agreement** (4 November 2016), Canada committed to reducing its GHG emissions by 30% below 2005 levels by 2030. In 2019, the 2005 level was estimated at 730 Mt CO₂ eq.

UNEP, Emission Gap Report 2019: The required cuts in emissions are now 2.7 per cent per year (0.7 %) from 2020 (2010) for the 2°C goal and 7.6 per cent per year (3.3%) on average for the 1.5°C goal. Evidently, greater cuts will be required the longer that action is delayed. (<https://www.unenvironment.org/resources/emissions-gap-report-2019>)

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Revision of Energy Taxation Directive (ETD)

Communication on the European Green Deal

.... Ensuring that taxation is aligned with climate objectives is also essential. The Commission will propose to revise the Energy Taxation Directive, focusing on environmental issues

→ Proposal for a revision of the Energy Taxation Directive: June 2021

Current status of taxing energy/electricity in the EU

EU legislation only sets harmonised *minimum* rates. Member States are free to apply excise duty rates above these minima, according to their own national needs.

Council Directive 2003/96/EC of 27 October 2003 **restructuring the Community framework for the taxation of energy products and electricity** – replacing Directive 92/81/EEC on the **harmonization of the structures of excise duties on mineral oils**

unleaded petrol: 287 EUR per 1000 litres → increased to 359 EUR per 1,000 litres in 2003

diesel / gas oil: 245 EUR per 1000 litres → increased to 330 EUR per 1,000 litres in 2003

EGD: *This will comprise the Emissions Trading System [industry, energy industry] , including a possible extension of European emissions trading to new sectors*

Revision of Energy Taxation Directive (ETD)

Overview of minimum rates of taxation based on energy and carbon content

- The minimum tax rates do not take account of the energy content of the energy product and externalities (CO₂ emission) of the different products.
- In addition, the rules require to tax renewable and alternative fuels on the same volume basis. They are substitutes for diesel and petrol. In actual energy terms, this translates into massive penalties for renewables. The ETD does not ensure the preferential tax treatment of these low- carbon alternatives, albeit their potential to reduce GHG emissions could mandate so. The ETD does not even provide clear legal provisions for the taxation of some of these new products.

	Minima as set in the ETD		
	In current units	in €/GJ	in €/tonne CO ₂
(1)	(2)	(3)	(4)
Motor fuel use			
Petrol	359 €/1000 litres	11	159
gas oil	330 €/1000 litres	8.9	120
kerosene	330 €/1000 litres	9.5	132
LPG	125 €/1000 kg	2.7	43
natural gas	2.6 €/GJ	2.6	46
Motor non-fuel use (certain commercial and industrial uses)			
gas oil	21 €/1000 litres	0.6	8
kerosene	21 €/1000 litres	0.6	9
LPG	41 €/1000 kg	0.9	14
natural gas	0.3 €/GJ	0.3	5
Heating use (non-business use)			
gas oil	21 €/1000 litres	0.6	8
heavy fuel oil	15 €/1000 kg	0.4	5
kerosene	0	0	0
LPG	0	0	0
natural gas	0.3 €/GJ	0.3	5
Coal	0.3 €/GJ	0.3	3
electricity	1.0 €/MWh	0.3	
Heating use (business use)			
gas oil	21 €/1000 litres	0.6	8
heavy fuel oil	15 €/1000 kg	0.4	5
kerosene	0	0	0
LPG	0	0	0
natural gas	0.15 €/GJ	0.15	2.7
Coal	0.15 €/GJ	0.15	1.6
Electricity	0.5 €/MWh	0.15	

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Carbon border adjustments

Communication on the European Green Deal

The environmental ambition of the Green Deal will not be achieved by Europe acting alone.

*Should differences in levels of ambition worldwide persist, as the EU increases its climate ambition, the Commission will propose a **carbon border adjustment mechanism**, for selected sectors, to reduce the risk of carbon leakage. This would ensure that the price of imports reflect more accurately their carbon content. This measure will be designed to comply with World Trade Organization rules and other international obligations of the EU.*

→ Proposal – indicative timetable: 2021

What is carbon border adjustments (CBAs)?

Border Carbon Adjustments (CBAs) is to price greenhouse gas emissions embodied in imports to the European Union (EU).

CBA is not new: for example, in 2010, campaign led by French President Nicolas Sarkozy



Carbon border adjustments

Reasoning: CBAs help create a market for low-carbon goods inside the EU, while boosting global demand for such goods, helping safeguard the climate and provide a *"level playing field"* for EU industry (topic of **carbon leakage**).

However: There has been no documented evidence of leakage on any significant scale so far. Nevertheless, the ambitious discussions on a net-zero EU by 2050 imply that ways are needed to help European industry to keep competitive at the global level.

Current situation: To date free allocation of EU Allowances (EUAs) to industry as part of the EU-ETS helps EU producers and reduce carbon leakage.

Carbon border adjustments

However, despite their advantages having been understood for many years, and proposals having been discussed, CBAs have had limited implementation to date either in the EU or in other jurisdictions.

Reasons for change in policy

- The number of allowances available for free allocation is decreasing as the EU-ETS cap reduces (annual reduction of emission allowances by 2.2% from 2021 compared to 1.7% currently – based on 40% reduction target)
- Allowance prices have risen strongly over the last two years (until early March 2020), giving increased urgency to the need for pricing to apply to all production competing in EU markets, given that free allocation will in future be unable to apply to cover all emissions.
- Many major jurisdictions still do not yet have carbon pricing, or in some cases have only very low prices, with little prospect of the introduction of carbon pricing similar to that in the EU in many cases

Carbon border adjustments

Form of CBAs

CBAs could be implemented as:

- a requirement to surrender EU-ETS allowances for imports; or
- a tariff on imports (alternative option - consumption tax on emission-intensive goods has been suggested)

Setting the level of CBAs

Introducing a CBA which prices embodied carbon in imports requires calculation of both:

- the quantity of embodied emissions, also known as carbon intensity; and
- the price of the embodied emissions

Treatment of exports

Continued free allocation of EUAs or other measures for exports may be necessary to avoid putting EU producers at a competitive disadvantage.

Carbon border adjustments

Political and legal challenges

- Political resistance from EU industry
- Compatibility with WTO rules
- International political challenges
- Administrative complexity

The European Green Deal



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Pursuing
green finance and investment
and ensuring a **just transition**

- Meeting the **additional investment needs**
- Proposal for a **Sustainable Europe Investment Plan** and a **Just Transition Mechanism (EUR 100 bn)** in January 2020
- **25% target for climate mainstreaming** across all EU programmes within the proposed MFF 2021-2027
- Proposed **new revenue streams** (“Own resources”) and review of the **Innovation and Modernisation funds** to deploy climate neutral solutions
- Mobilisation of **InvestEU** in support of the Green Deal objectives
- Work with the **EIB group (climate target to 50% by 2025)** and **other financial institutions** (NPBs, other int’l financial institutions)
- Renewed **Sustainable Finance Strategy** in Autumn 2020
- **Taxonomy, Corporate governance** framework
- Review of **Non-Financial Reporting** Directive
- Support **natural capital accounting**
- **Labels for retail financial investment products**
- Developing **EU green bond standard**; integration of environmental risks in **EU prudential framework**



Investment - sustainable finance

The headline figure of the EGD: mobilising 1 trillion EUR from EU budget over a 10 year period

What may be the macroeconomic dimension?

- 100 billion EUR per annum equates to 0.7 % of GDP (EU-27; 2018) → not an *insignificant sum*

For information purposes: additional annual investment is projected to be in the range of EUR 175–290 billion over the 2031–2050 period for a net zero GHG economy, as compared to the baseline (approx. 1.5 % of GDP) ; lower figure aims to achieve an 80 per cent reduction and the higher one to meet a net-zero GHG economy in 2050.

- Re-shuffling of EU's planned budget and attracting private sector co-financing: crowding in private investment
- Just Transition Fund (JTF) – used to response to the costs of phasing-out carbon-intensive industries avoiding social disruptions in regions: 7.5 billion EUR

Reflections

- The ambition of the new European Commission, which has made the “Green Deal” its founding act, deserves to be praised for two reasons: it breaks with the ecological wait-and-see attitude of the previous Commission and it reaffirms the environmental purpose on the world stage of the European Union, which was overlooked if not lost during the 2010 decade. (<https://www.ofce.sciences-po.fr/pdf/pbrief/2020/OFCEpbrief63.pdf>)
- Europe’s Green Deal is the first comprehensive plan for achieving sustainable development in any major region of the world ... Europe as a mixed economy that combines markets with public goals, investment and civil society (Sachs, J., Europe’s Green Deal, Project Syndicate)
- The Green Deal does not combine ecological conversion with an agenda of social inclusion and underscores the low growth trend of Europe, in light of the 113 million people still in poverty (criticizing Europe as a neoliberal capitalist model (http://www2.euromemorandum.eu/uploads/euromemorandum_2020.pdf))
- Much too early

Thanks!

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