



Step up climate ambition in Europe

Brussels, 23 October 2018

EU - non-EU

EU as potential hook for work in other countries;
though separate processes exist:

- Energy Community Climate Action working group
 - UK: Climate Change Commission
 - Switzerland: New Climate Law
 - ...
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- Interesting to see how different dynamics can support each other
 - This presentation focuses on the EU – but want to know and engage in all

2020 -2030 - 2050

- Attention needs to be given to unavoidable issue of competition between focusing on short- and/or longer-term ambition
- Two key messages:
 - IPCC: early action is crucial
 - Need to learn from the past

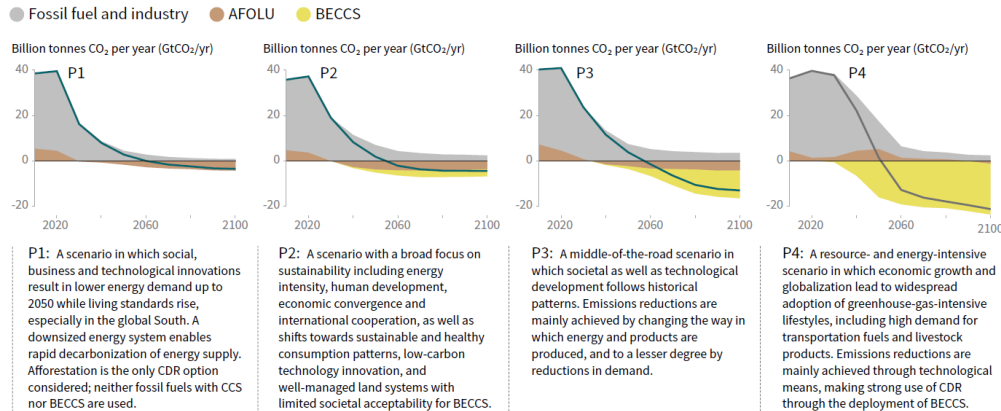
IPCC Special Report on 1.5°C

D1. Estimates of the global emissions outcome of current nationally stated mitigation ambitions as submitted under the Paris Agreement would lead to global greenhouse gas emissions¹⁸ in 2030 of 52–58 GtCO₂eq yr⁻¹ (*medium confidence*). Pathways reflecting these ambitions would not limit global warming to 1.5°C, even if supplemented by very challenging increases in the scale and ambition of emissions reductions after 2030 (*high confidence*). Avoiding overshoot and reliance on future large-scale deployment of carbon dioxide removal (CDR) can only be achieved if global CO₂ emissions start to decline well before 2030 (*high confidence*). {1.2, 2.3, 3.3, 3.4, 4.2, 4.4, Cross-Chapter Box 11 in Chapter 4}

Characteristics of four illustrative model pathways

Different mitigation strategies can achieve the net emissions reductions that would be required to follow a pathway that limits global warming to 1.5°C with no or limited overshoot. All pathways use Carbon Dioxide Removal (CDR), but the amount varies across pathways, as do the relative contributions of Bioenergy with Carbon Capture and Storage (BECCS) and removals in the Agriculture, Forestry and Other Land Use (AFOLU) sector. This has implications for emissions and several other pathway characteristics.

Breakdown of contributions to global net CO₂ emissions in four illustrative model pathways



Global indicators	P1	P2	P3	P4	Interquartile range
Pathway classification	No or low overshoot	No or low overshoot	No or low overshoot	High overshoot	No or low overshoot
CO ₂ emission change in 2030 (% rel to 2010)	-58	-47	-41	4	(-59,-40)
↳ in 2050 (% rel to 2010)	-93	-95	-91	-97	(-104,-91)
Kyoto-GHG emissions* in 2030 (% rel to 2010)	-50	-49	-35	-2	(-55,-38)
↳ in 2050 (% rel to 2010)	-82	-89	-78	-80	(-93,-81)
Final energy demand** in 2030 (% rel to 2010)	-15	-5	17	39	(-12, 7)
↳ in 2050 (% rel to 2010)	-32	2	21	44	(-11, 22)
Renewable share in electricity in 2030 (%)	60	58	48	25	(47, 65)
↳ in 2050 (%)	77	81	63	70	(69, 87)
Primary energy from coal in 2030 (% rel to 2010)	-78	-61	-75	-59	(-78, -59)
↳ in 2050 (% rel to 2010)	-97	-77	-73	-97	(-95, -74)
from oil in 2030 (% rel to 2010)	-37	-13	-3	86	(-34, 3)
↳ in 2050 (% rel to 2010)	-87	-50	-81	-32	(-78, -31)
from gas in 2030 (% rel to 2010)	-25	-20	33	37	(-26, 21)
↳ in 2050 (% rel to 2010)	-74	-53	21	-48	(-56, 6)
from nuclear in 2030 (% rel to 2010)	59	83	98	106	(44, 102)
↳ in 2050 (% rel to 2010)	150	98	501	468	(91, 190)
from biomass in 2030 (% rel to 2010)	-11	0	36	-1	(29, 80)
↳ in 2050 (% rel to 2010)	-16	49	121	418	(123, 261)
from non-biomass renewables in 2030 (% rel to 2010)	430	470	315	110	(243, 438)
↳ in 2050 (% rel to 2010)	832	1327	878	1137	(575, 1300)
Cumulative CCS until 2100 (GtCO ₂)	0	348	687	1218	(550, 1017)
↳ of which BECCS (GtCO ₂)	0	151	414	1191	(364, 662)
Land area of bioenergy crops in 2050 (million hectare)	22	93	283	724	(151, 320)
Agricultural CH ₄ emissions in 2030 (% rel to 2010)	-24	-48	1	14	(-30,-11)
↳ in 2050 (% rel to 2010)	-33	-69	-23	2	(-46,-23)
Agricultural N ₂ O emissions in 2030 (% rel to 2010)	5	-26	15	3	(-21, 4)
↳ in 2050 (% rel to 2010)	6	-26	0	39	(-26, 1)

NOTE: Indicators have been selected to show global trends identified by the Chapter 2 assessment. National and sectoral characteristics can differ substantially from the global trends shown above.

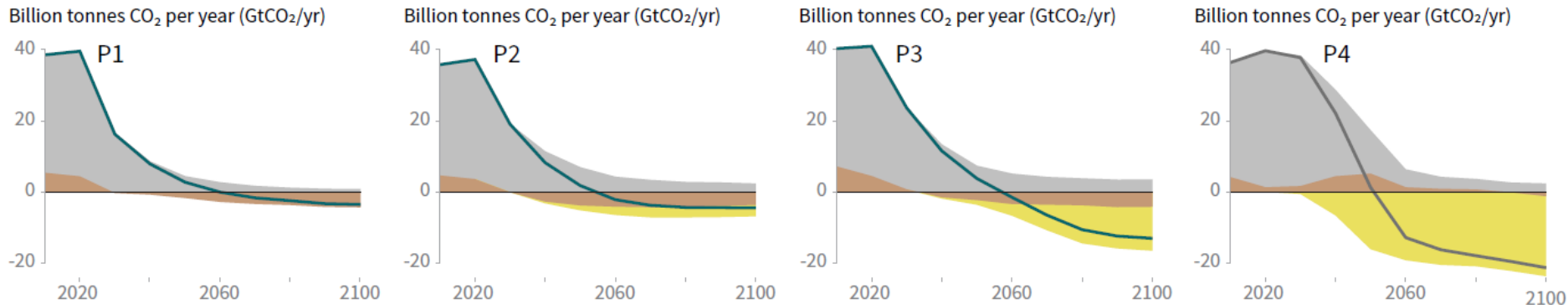
Source: IPCC Special Report on Global Warming of 1.5°C

* Kyoto-gas emissions are based on SAR GWP-100

** Changes in energy demand are associated with improvements in energy efficiency and behaviour change

Breakdown of contributions to global net CO₂ emissions in four illustrative model pathways

● Fossil fuel and industry ● AFOLU ● BECCS



P1: A scenario in which social, business and technological innovations result in lower energy demand up to 2050 while living standards rise, especially in the global South. A downsized energy system enables rapid decarbonization of energy supply. Afforestation is the only CDR option considered; neither fossil fuels with CCS nor BECCS are used.

P2: A scenario with a broad focus on sustainability including energy intensity, human development, economic convergence and international cooperation, as well as shifts towards sustainable and healthy consumption patterns, low-carbon technology innovation, and well-managed land systems with limited societal acceptability for BECCS.

P3: A middle-of-the-road scenario in which societal as well as technological development follows historical patterns. Emissions reductions are mainly achieved by changing the way in which energy and products are produced, and to a lesser degree by reductions in demand.

P4: A resource- and energy-intensive scenario in which economic growth and globalization lead to widespread adoption of greenhouse-gas-intensive lifestyles, including high demand for transportation fuels and livestock products. Emissions reductions are mainly achieved through technological means, making strong use of CDR through the deployment of BECCS.

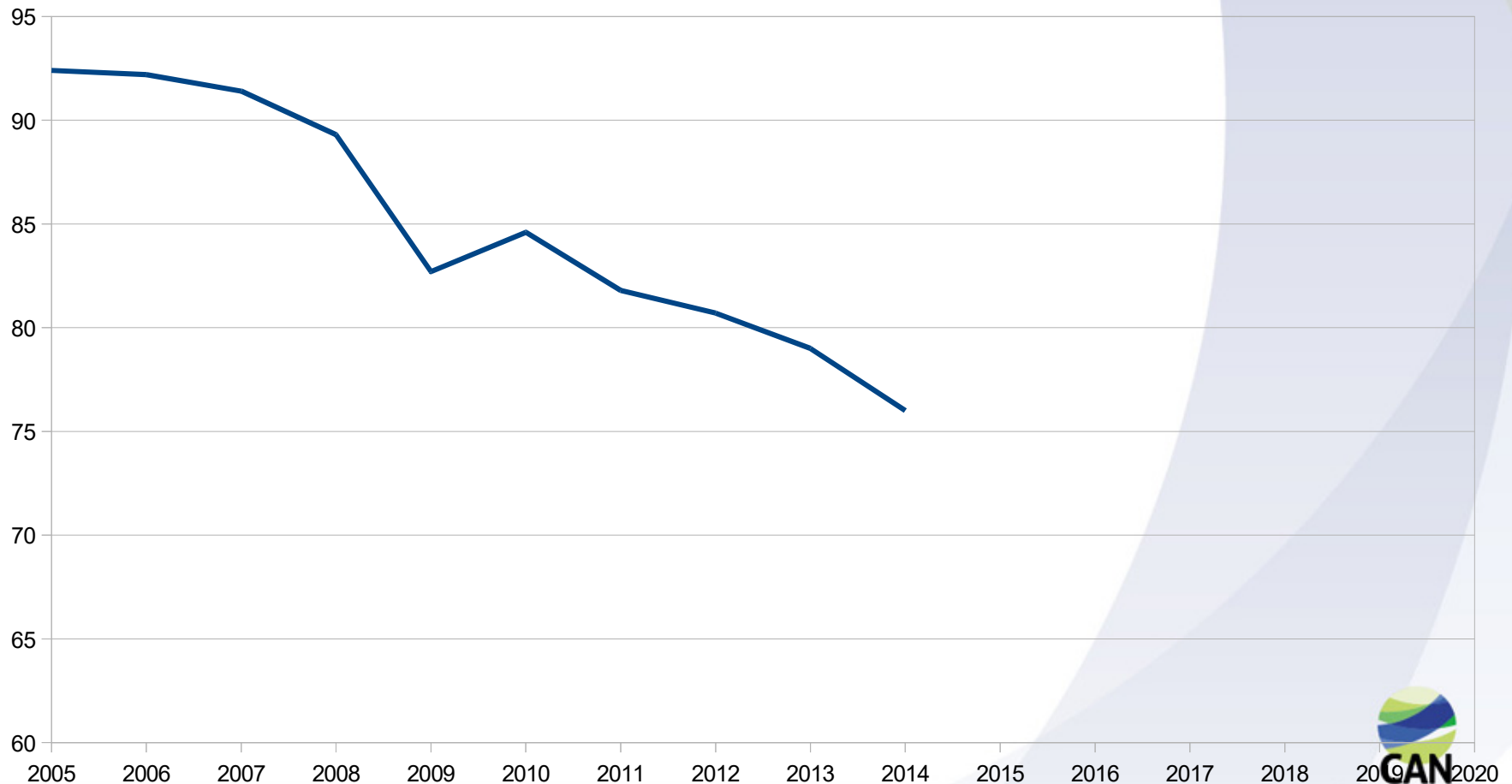
Global indicators

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Looking back: 2020 targets

- May 2007: EU agrees 20% target for 2020 + condition commitment to increase to 30%
- December 2009: Copenhagen COP15 not delivering
- May 2010 & February 2012: Commission papers on options to move to 30%
- December 2012: CAN Europe + Commissioner Hedegaard stating current policies lead to 27%

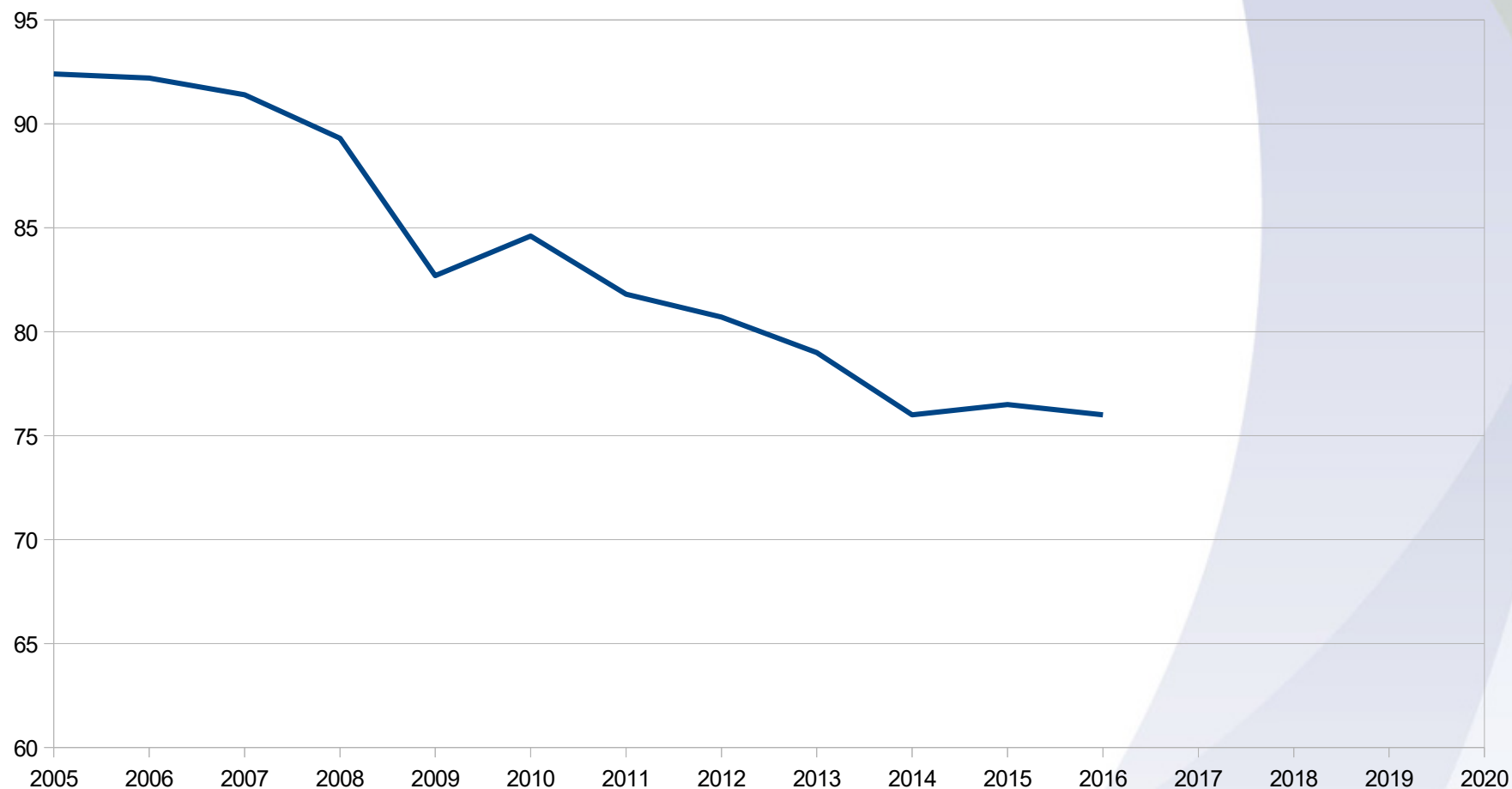
EU greenhouse gas emissions reductions 2005-2014



Looking back: 2030 targets

- March 2013: Commission Green paper on 2030
- February 2014: Commission Communication: 40% by 2030
- October 2014: European Council “at least” 40% by 2030
- February 2015: Environment Council: NDC: at least 40% by 2030
- December 2015: COP21 & Paris Agreement

GHG emission reductions 2005-2016



Where are we with 2020 targets?

- No debate at EU level
- Did we lose/got distracted?
- Still overshooting?
 - Yes at EU level
 - Not in some countries for certain targets (both EU binding and voluntary - eg. Germany)
- How to expose failure without undermining broader narrative that we can do more?:
 - Show that EU is overachieving
 - Focus on solutions: yes we can

Where are we with 2030 target revision?

1. UN process
2. EU process
3. Long-Term Strategy
4. Bottom-up approach
5. Sectoral approach
6. Member States
7. Timeline & opportunities
8. Messages

UN process

- Hooks and deadlines:
 - Paris COP decision: re-submission by 2020 (9 months before COP26): April 2020 (real deadline **December 2020**)
 - UN Secretary General Climate Summit: **September 2019** (too early?/how to use?)

EU process

- No process yet - Environment Council agreed: communicate or update NDC by 2020
- Assumption to have similar process as in 2014: not a legislative file:
 - Council conclusions: consensus
 - European Parliament not needed
 - European Council October 2014 insisted Heads of State and Government have final say on numbers
- Unclear when the Commission would launch a proposal – likely after adoption LTS (or as part of it?)

Assumed process

Q1 2014	Q2 2014	Q3 2014	Q4 2014	Q1 2015	Q2 2015
02.2014 Commission communication on 2030 framework	05.2014 European Parliament elections and establishment new European Commission	10.2014 European Council Conclusions on 2030 climate and energy framework		03.2015 Environment Council Adoption EU INDC	
Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020
Commission to present new 250 low carbon Roadmap	European Parliament elections and establishment new European Commission	European Council to adopt a long term low greenhouse gas emissions development strategy for the EU	<i>deadline for submission of EU's long term strategy to UN</i>	Environment Council to revise and adopt EU NDC on basis of long term strategy	<i>deadline for re-submission of EU's 2030 NDC to UN</i>

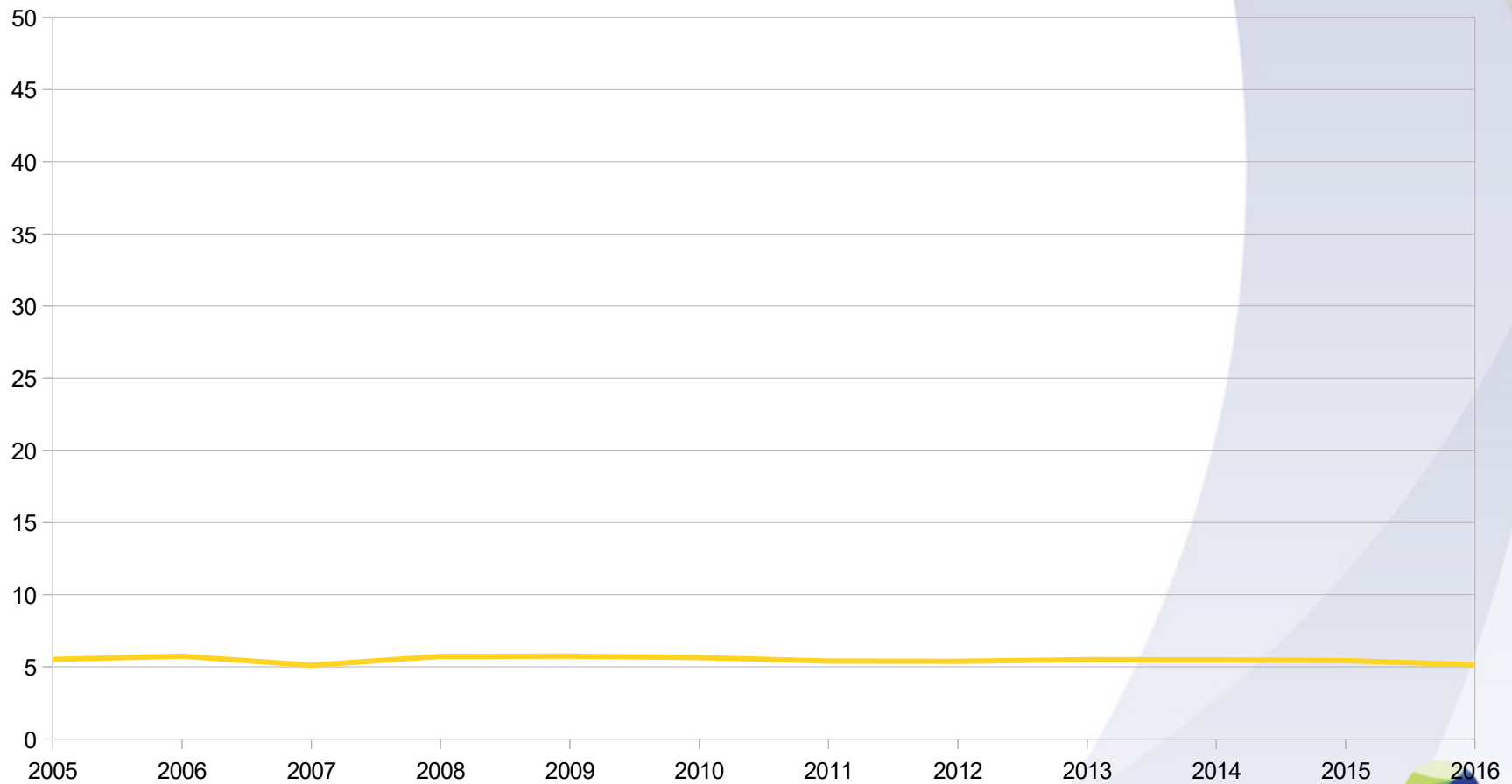
Long-term Strategy

- Also part of Paris Agreement (submit long-term low greenhouse gas emissions development strategies by 2020)
- Requested by European Council March 2018
- Commission to present draft on 28 November:
 - Commission Communication (doc for UNFCCC)
 - Staff Working Document
 - Background numbers
- First discussion by HOSG: May 2019 (Sibiu, Romania)
- Final discussion? (before UNSG Summit?)

Long-Term Strategy: options

- Commission insists it will present 3 options – will they show a preference for net zero by 2050?
- Options fully in line with 80-95% pre-Copenhagen position (and Commission claims all in line with Paris Agreement):
 - **-80% by 2050**, through 1 of 5 pathways (efficiency; renewables; circular economy; hydrogen; e-fuels)
 - net zero by 2070: combining all 5 pathways above
 - **net zero/-95%** by 2050: combining all 5 + lifestyle changes + negative emissions (more negative emissions could reduce the 95%)

Share LULUCF Removals of 1990 emissions



Long-Term Strategy: concerns (1)

- In line with Paris Agreement? Compatible with IPCC 1.5°C pathways?
- How to react to promotion of one technology only? And how to reconcile with exclusion of certain technologies?
- Sufficient attention for lifestyle changes – and how to do this?
- Realistic about negative emissions (technologies)? Increase? Accounting rules?

Long-Term Strategy: concerns (2)

- Commission's strategy to achieve net zero by 2050 through being silent about 2030 implications: can we take the risk? How can we support 2030 within such a strategy? Can we adapt messages to actual state of debate in specific countries?
- Does the strategy indicate full potential of all solutions? Does it indicate full potential of all policies and measures?

Bottom-up

- NECPs
- National long term strategies and net zero dates
- Coal phase out & other fossil fuels/sectors
- Cities and regions: value? Communication?
- How to link national dynamics with EU target debate?

Sectoral approach

- New energy targets: 32% RES and 32,5% EE lead to -45% greenhouse gas emissions
- Other sectors
 - Transport: CO2 standards debate
 - Industry: energy intensive industry
 - Agriculture?
 - Forestry: Nature4Climate/CLARA

Member States

Leaders	Supporters	Followers	Doubters	Hesitants	Latecomers
France Netherlands Sweden? Luxembourg Portugal	Spain Italy Denmark Finland Slovenia [UK]	Lithuania Greece Cyprus	Germany Austria? Belgium Slovakia Estonia	Ireland Czechia Romania Malta	Poland Hungary Bulgaria Croatia Latvia

Timeline & Opportunities (1)

- People's Climate Case (2018-2019)
 - Get Court to oblige Commission to draft new increased legislation
- EU Budget (2018-2019-2020)
 - Link higher ambition to increased funding
 - Increase climate earmarking
 - Making budget climate proof
- NECPs and national long term strategies
 - Draft NECPs by end 2018
 - Commission assessment Q1 2019
 - Final draft and LTS: end 2019

Timeline & Opportunities (2)

- Climate Vulnerable Forum Virtual Summit (22-23/11/18)
 - Activity in European Parliament
 - Pressure on Commission
- COP24 (2-14/12/18)
 - Get Ministers to support increasing ambition
- Canete/Sefcovic Member States tour on long term strategy (Q1 2019)
- Sibiu Summit (European Council)
 - Discuss (or agree?) long term strategy

Timeline & Opportunities (3)

- European Parliament Elections (23-26/5/2019)
 - Get MEPs to support higher ambition and commit to take initiative
- Installation new European Commission (09-10/2019)
 - Get new Commissions/President to support higher ambition (eg. Stubb: net zero by 2045)
- UN Secretary General Climate Summit (09/2019)
 - Momentum?
 - Joint EU-China initiative?
- COP25 (Brazil?)

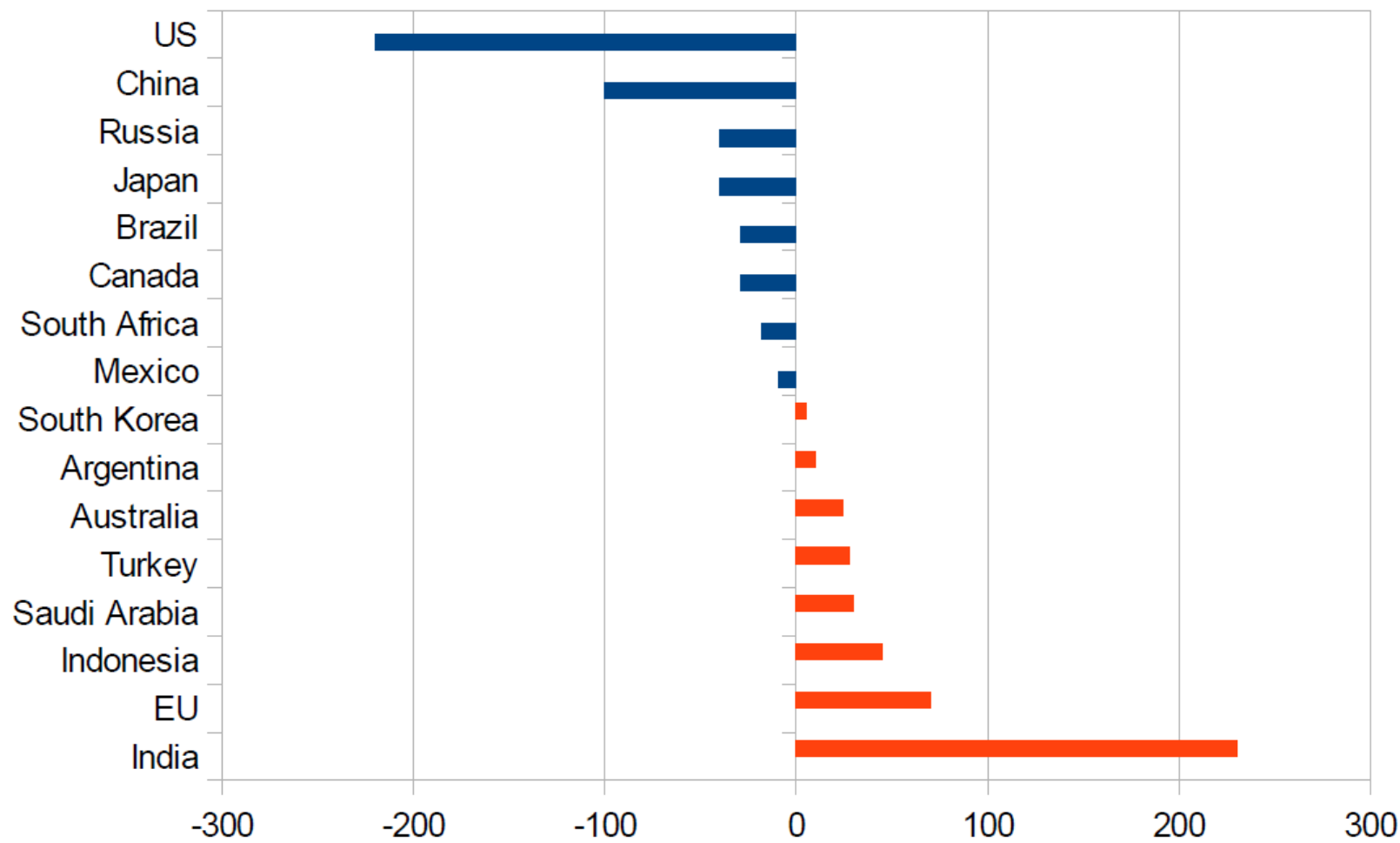
Timeline & Opportunities (4)

- TYNDP – 1.5°C compatible scenarios (03/2020)
 - Showcase potential
- Deadline re-submission 2030 target to UNFCCC
- COP26 (UK?)

Messages & Messengers

- Paris Agreement
- Urgency/1.5°C/IPCC
- Positive: opportunities/co-benefits: economics – health – jobs
- Just Transition
- EU leadership
- Overshooting current targets
- Other messengers: businesses – investors - trade unions – cities and regions – scientists – youth – health practitioners – consumers - ...

EU leadership?



Final questions

- UN Processes (TD/UNSG/re-submission):
 - Are these real opportunities? And how to use them?
- Communications:
 - Messages? Messengers?
 - Strategy?
- EP elections: how to use them? New Commission?
- Green Growth Group:
 - What role? & How to mobilise as a group?
- Long-term strategy:
 - How to ensure synergy with 2030 debate?
 - What focus?
- Non-EU: how to ensure benefits between processes