A Clean Planet for all

A European strategic long term vision for a prosperous, modern, competitive and climate neutral economy

Brussels
February 28, 2019

Tom Van Ierland
European Commission
Agreed 2030 energy and climate targets

2020
-20% Greenhouse Gas Emissions

2030
≤ - 40% Greenhouse Gas Emissions
≥32% Renewable Energy
≥32.5% Energy Efficiency
10% Interconnection

Energy Union governance system
Three pillars of EU climate policy reducing greenhouse gas emissions until 2030

Emissions trading
-43 %
Including: Power/Energy Sector and Industry, Aviation

Effort sharing
-30 %
Including: road transport, buildings, waste, agriculture non CO2

Non-emissions trading
-30 %
Max 280 MtCO2eq

Land use, land use change, forestry
"No-Debit"
Max 100 MtCO2eq

Full flexibility
EU ETS (1): In a nutshell

- **Cap-and-trade system:**
  - *Each allowance represents the right to emit one tonne of CO2*
  - **Cap:** Amount of allowances determines amount of emissions and guarantees environmental outcome
  - **Trade:** Scarcity and tradability of allowances determine price and ensure cost-effectiveness
  - **Coverage:** ~12,000 energy-intensive installations across EU and aircraft operators; around 41% of EU CO2 emissions

- In recent years, large supply demand imbalance on the ETS market, with a build-up of a large surplus and reduced investment signalling function.

- Introduction of a Market Stability Reserve (automatic adjustment of supply from 2019, based on number of allowances in circulation).
Increase of the Linear Reduction Factor (LRF) from 1.74% to 2.2% as of 2021 to reach 43% reduction in 2030

Auction share of remain at 57%, 10% redistribution of some revenue to low income Member States

Free allocation to industry to continue, addressing competitiveness and risk of carbon leakage

Innovation fund created – 450 million allowances

Setting up of a Modernisation fund (2% of the cap)
Non-ETS sectors cover around 60% of the EU's GHG emissions

Total GHG emissions in the EU

- EU ETS (40%)
- Non-EU ETS (60%)

Share of non-ETS emissions

- Transport: 35%
- Buildings: 25%
- Agriculture: 17%
- Other including small Industry: 17%
- Waste: 6%
Accompanying EU energy policies until 2030

- **New Electricity Market Design**
  (Regulation internal market electricity)

- **Energy Efficiency**

- **Renewables**
  (Revised Renewable Energy Directive)

- **Energy Union Governance**
  (Governance Regulation)
Energy: A flexible and competitive electricity market to integrate increasing production of renewables

- Strengthened short-term markets
- Competitive retail markets
- Level-playing field among sources
- Regional cooperation and risk preparedness
- Enhanced market governance
Transport: CO2 and car regulation is spreading

Passenger car CO₂ emissions and fuel consumption, normalized to NEDC
Our Vision for a Clean Planet by 2050

Different zero GHG pathways lead to different levels of remaining emissions and absorption of GHG emissions.
7 Building Blocks

1. Energy efficiency
2. Deployments of renewables
3. Clean, safe & connected mobility
4. Competitive industry and circular economy
5. Infrastructure and inter-connections
6. Bio-economy and natural carbon sinks
7. Tackle remaining emissions with carbon capture and storage
Additional annual investment needs from 2031-2050 in relation to the scale of additional GHG reductions

Source: PRIMES
Decoupling growth and GHG emissions

- The EU has already started decoupling economic growth from GHG emissions
- A net zero-GHG economy can be achieved while growing output at the same pace as under the baseline.

• **Caveat:** Calculations do not include damage/adaptation costs due to climate change

*Source: ESTAT, JRC-GEM-E3 and E3ME*
Enabling framework crucial to deliver transformation

Taxation
Ensuring an effective pricing of externalities and a fair distribution of transition costs

Energy Union and Climate Action
Making the commercial rules fit for the deployment of new technologies in energy, building and mobility

EU Budget and Sustainable Finance
Preparing the rollout of key infrastructure and incentivising investments in sustainable business models

Local Action
Accompanying the transformation of regions and economic sectors

Research and Innovation
Identifying key technologies for the transition and accelerating demonstration

Industrial Strategy and Circular Economy
Roll out of technologies, strategic value chains and increased circularity

Free but Fair Trade
Working towards a global level playing field for competitiveness

The Social Pillar
Empowering citizens with skills for new business models

Digital Single Market
Creating the digital "operating system" to enable system integration and new business models

Competition Policy and State Aid
Ensure coherence with EU climate and environment goals
Just transition

• The transition will spur growth in new sectors. 'Green jobs' already represent 4 million jobs in the EU.

• But some sectors will face challenges (e.g. coal mining and fuel extraction) and others will transform (e.g. energy-intensive industries and automotive sector).

• This will affect some regions more than others.

• Modernisation process has to be managed, no-one left behind, relevant policies must be deployed to the fullest. EU budget, employment and cohesion policies have a role.

• E.g. Platform and pilots for coal and carbon-intensive regions to be reinforced.

• Skill training is key
Next steps

- National Climate and Energy Plans under development. Together with stakeholders vision on 2050 will enrich the debate.

- Invitation to all the EU institutions to consider the EU vision.

- EU leaders to reflect on this at the Sibiu summit, all relevant Council formations will hold policy debates.

- Societal debate in 2019 is key! In an open and inclusive manner with National Parliaments, business, non-governmental organisations, trade unions, cities and communities, as well as citizens and the youth.

- EU to adopt and submit an ambitious strategy by early 2020 to the UNFCCC as requested under the Paris Agreement.

- Show leadership and work with other parties to do the same.