Prospects for carbon markets and net zero

Stefano De Clara – International Policy Director, IETA
28 May 2021
About IETA

- Collective voice of business on carbon pricing, markets and finance
- Global non-profit association
- Policy design, thought leadership, best practices, global capacity building,
- Global Partnerships & Dialogues with UNFCCC, World Bank, OECD-IEA and many more
1.5°C Pathway Emissions (2020-2050)

Total CO₂ net emissions
GTCO₂

-10
-5
0
5
10
15
20
25
30
35
40
45

2020
2030
2040
2050

Cumulative 2018–50 carbon budget

Source: McKinsey 1.5oC Scenario Analysis; IPCC; Le Quéré et al. 2018
Net Zero Tracker: 2021 Scorecard (Countries)

- **Suriname**: Not Achieved
- **Bhutan**: Not Achieved
- **Sweden**: 2045
- **United Kingdom**: 2050
- **France**: 2050
- **Denmark**: 2050
- **New Zealand**: 2050
- **Hungary**: 2050
- **European Union**: 2050
- **Canada**: 2050
- **South Korea**: 2050
- **Spain**: 2050
- **Chile**: 2050
- **Fiji**: 2050

Net Zero Tracker: 2021 Scorecard (24 May 2021)
Energy and Climate Intelligence Unit
https://eciu.net/netzerotracker
And many others “under discussion”, for a total of 124

<table>
<thead>
<tr>
<th>Country</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finland</td>
<td>2035</td>
</tr>
<tr>
<td>Austria</td>
<td>2040</td>
</tr>
<tr>
<td>Iceland</td>
<td>2040</td>
</tr>
<tr>
<td>Germany</td>
<td>2045</td>
</tr>
<tr>
<td>US</td>
<td>2050</td>
</tr>
<tr>
<td>Japan</td>
<td>2050</td>
</tr>
<tr>
<td>South Africa</td>
<td>2050</td>
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<tr>
<td>Brazil</td>
<td>2050</td>
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<td>Switzerland</td>
<td>2050</td>
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<td>Norway</td>
<td>2050</td>
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<tr>
<td>Ireland</td>
<td>2050</td>
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<td>Portugal</td>
<td>2050</td>
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<tr>
<td>Panama</td>
<td>2050</td>
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<tr>
<td>Costa Rica</td>
<td>2050</td>
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<tr>
<td>Slovenia</td>
<td>2050</td>
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<tr>
<td>Andorra</td>
<td>2050</td>
</tr>
<tr>
<td>Vatican City</td>
<td>2050</td>
</tr>
<tr>
<td>Marshall Islands</td>
<td>2050</td>
</tr>
<tr>
<td>China</td>
<td>2060</td>
</tr>
<tr>
<td>Kazakhstan</td>
<td>2060</td>
</tr>
</tbody>
</table>

Net Zero Tracker: 2021 Scorecard (Countries)

Energy and Climate Intelligence Unit
https://eciu.net/netzerotracker
Net Zero Tracker: 2021 Scorecard

**EMISSIONS**
- 61%

**GDP (PPP)**
- 68%

**POPULATION**
- 56%

*Fig. 1* Percentage of greenhouse gas emissions, GDP and population covered by national net zero pledges (the status of these pledges ranges widely, including proposed, in discussion, in policy document, in law and achieved. For more details, see Figure 5). Population estimate also includes cities, states, and regions. GDP is assessed in purchasing power parity terms (see footnote 43 on page 16)

Taking Stock: A global assessment of net zero targets, Energy and Climate Intelligence Unit
[https://eciu.net/analysis/infographics/global-net-zero-ambition](https://eciu.net/analysis/infographics/global-net-zero-ambition)
Countries Must Enhance Climate Ambition

2100 WARMING PROJECTIONS
Emissions and expected warming based on pledges and current policies

Warming projected by 2100
- **Current policies**: 2.7 – 3.1°C
- **Pledges & Targets**: 2.4°C
- **Optimistic net zero targets**: 2.0°C
- **1.5°C consistent**: 1.6 – 1.7°C
- **1.5°C consistent**: 1.3°C

May 2021 update

Climate Action Tracker (May 2021)
https://climateactiontracker.org/
Countries Must Enhance Climate Ambition

CLIMATE TARGETS
Status of the NDC update process

57 Countries have submitted new NDC targets (56 countries plus the EU27)
- 13 Countries we analyse have submitted stronger NDC targets (12 countries plus the EU27)
- 9 Countries we analyse did not increase ambition
- 35 Countries we do not analyse submitted new NDC targets

6 Countries have proposed new NDC targets
- 5 Countries we analyse have proposed stronger NDC targets
- 1 Country we analyse stated it will not propose more ambitious targets
- 0 Countries we do not analyse proposed new NDC targets

101 Countries have not updated targets

Last updated: May 19, 2021
Map is for reference only
Climate Action Tracker (May 2021)
https://climateactiontracker.org/
Carbon pricing worldwide

World Bank: State and Trends of Carbon Pricing 2020
https://openknowledge.worldbank.org/handle/10986/33809
Carbon pricing worldwide

World Bank: State and Trends of Carbon Pricing 2020
https://openknowledge.worldbank.org/handle/10986/33809
Carbon markets worldwide

- California
- Oregon
- Washington
- British Columbia
- Alberta
- Manitoba
- Quebec
- New Brunswick
- Nova Scotia
- RGGI
- US
- Canada
- Mexico
- Colombia
- Trinidad and Tobago
- Switzerland
- EU ETS
- Ukraine
- Turkey
- Kazakhstan
- China
- South Africa
- Australia
- New Zealand
- Vietnam
- Thailand
- Tokyo & Saitama
- South Korea
- Beijing
- Tianjin
- Hubei
- Shenzhen
- Shanghai
- Chongqing
- Taiwan
- Guangdong

- ETS in place
- ETS Being Designed
- Carbon Tax with Offsets Being designed or in place
- Hybrid Carbon Pricing

Linkages

Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA)
GLOBAL EXPANSION OF ETS
The share of global GHG emissions under an ETS tripled since 2005

The graphic depicts the worldwide growth of emissions trading over time. Systems are spreading around the world. With new additions in China, Germany, the UK and Virginia, the share of GHG emissions covered by emissions trading has tripled since the launch of the EU ETS in 2005. Changes over time are driven by the addition of new sectors and systems, as well as by the contracting trends of declining caps in many systems and growing global emissions. See “Notes on Methods and Sources” for further details.
Market Friendly NDCs (2015-2018 update)

NDC Synthesis report
“Almost all Parties provided information relating to voluntary cooperation. Most of them, more than double compared with the previous NDCs, communicated that they plan to or will possibly use voluntary cooperation in at least one of its scopes in implementing their NDCs”
The economic potential available through Article 6 from extension to include land use change is significant.

Utilizing the economic efficiency gains to enhance ambition offers additional potential benefits.

All countries show GDP gains.

Realizing this potential is a major real-world challenge.

### 2030 Potential Article 6 Reduction in Cost
(Billions 2015 USD/year)

<table>
<thead>
<tr>
<th>Resource</th>
<th>Reduction in Cost</th>
<th>Increased Ambition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fossil Fuels Only</td>
<td>$250 billion</td>
<td>5 GtCO₂ per year</td>
</tr>
<tr>
<td>Land Use Only</td>
<td>$70 billion</td>
<td>4 GtCO₂ per year</td>
</tr>
<tr>
<td>Combined</td>
<td>$320 billion</td>
<td>9 GtCO₂ per year</td>
</tr>
</tbody>
</table>
Article 6 pilots

Figure 5: The global Article 6 piloting landscape
Thank you!