

Climate Change Policy Outlook and Challenges for 2019

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Points of the report

- ✓ In 2018, 23 countries including eight EU Member States and Canada announced a joint declaration of commitment to explore the possibility for stepping up their 2030 pledges under the Paris Agreement. The Intergovernmental Panel on Climate Change approved a special report on global warming of 1.5°C. There is movement to take advantage of the September 2019 United Nations Climate Summit for revisiting and enhancing GHG emission reduction targets for 2030 under the Paris Agreement. Given that countries face realities, country-by-country actions should be watched carefully.
- ✓ In August 2018, the Meeting on a Long-term Strategy under the Paris Agreement as Growth Strategy was established to discuss a vision for Japan's long-term strategy under the Paris Agreement. We will have to pay attention to how the meeting would include such matters as innovation, green finance, green business and local actions into the long-term strategy before the G20 summit and ministerial meeting in June 2019 in Japan.

Focuses at COP24

Focuses at the 24th session of the Conference of Parties to the United Nations Framework Convention on Climate Change (COP24)

- Preparation of detailed rules for the Paris Agreement
 - Balance between finance/adaptation and mitigation
 - Differentiated obligations and standards between developed and developing countries?
- Stocktake of the collective efforts of the Parties' nationally determined contributions (NDCs) up to 2030 (Talanoa dialogue)
- A Just Transition Declarations (calling for a just transition of the workforce and the creation of decent work and quality jobs in transition towards a low-carbon economy), and declarations on forests and e-mobility

COP24 outcomes

Preparation of detailed rules for the Paris Agreement

- The Paris Agreement Work Programme has been completed
 - Applies single/common modalities, procedures and guidelines for the transparency framework for action and support to all Parties for measuring their emissions and tracking their climate policies while giving flexibility to those developing countries Parties that need it in the light of their capacity (providing support to developing countries for reporting)
 - Initiates in November 2020 deliberations on setting a new collective quantified goal from a floor of USD 100 billion per year
 - Decisions on market mechanisms are postponed to the next session in 2019

Stocktake of the collective efforts of the Parties' NDCs up to 2030

- Welcomes the timely completion of the Intergovernmental Panel on Climate Change Special Report on Global Warming of 1.5°C
- Invites Parties to consider the outcome, inputs and outputs of the Talanoa dialogue in preparing their nationally determined contributions (2030 targets)
- Calls on Parties to participate in the 2019 Climate Summit convened by the United Nations Secretary-General and demonstrate, through such participation, their enhanced ambition in addressing climate change

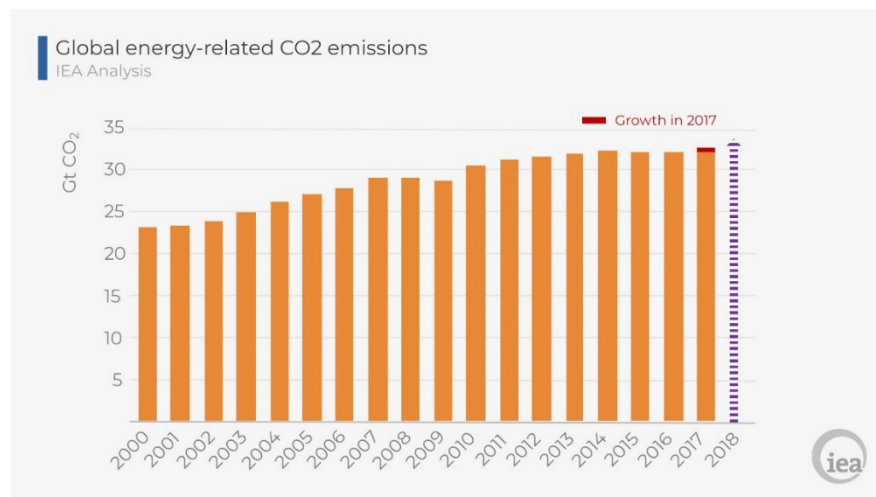
A Just Transition Declaration

- Highlights the importance of further work, including sharing experiences, encouraging taking into consideration the issue of just transition, encouraging support for developing countries to promote low greenhouse gas emission and sustainable economic activities and encouraging that the transition to low greenhouse gas emission and climate resilient development is in line with the UN Sustainable Development Goals. Signed by 54 Parties.

- In June 2018, 23 countries including eight EU Member States and Canada announced a joint declaration of commitment to explore the possibility for stepping up their 2030 pledges under the Paris Agreement.
- The Intergovernmental Panel on Climate Change approved a special report on global warming of 1.5°C in October 2018.
 - In model emission pathways with no or limited overshoot of 1.5°C, global net anthropogenic CO₂ emissions decline by 40-60% from 2010 levels by 2030.
 - For limiting global warming to below 2°C, CO₂ emissions are projected to decline by 10-30% by 2030 in most emission pathways.
- In October 2018, the International Energy Agency expected energy-related CO₂ emissions would increase once again in 2018 after growing in 2017.



- Movement to take advantage of the September 2019 United Nations Climate Summit for revisiting and enhancing GHG emission reduction targets for 2030 under the Paris Agreement.
- Countries, however, face the realities as described below.



(Source) IEA Director General Fatih Birol's Twitter message on October 8

3. Country-by-country outlook

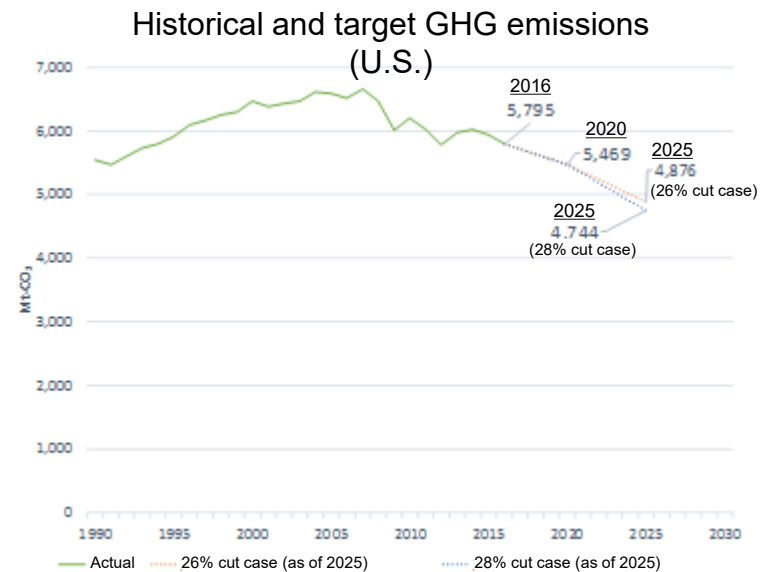
U.S.

● Foreign policy

- In May 2018, in the Talanoa dialogue at the Climate Change Conference held in Bonn, Germany, the United States referred to innovations in nuclear energy, fossil fuels and carbon capture and storage.
- In May 2018, at the Ninth Clean Energy Ministerial, a new US-led initiative titled "Nuclear Innovation: Clean Energy Future (NICE Future)" was launched.
- In December 2018, the Trump administration, at COP24 as in the previous year, held a side event to emphasize the benefits of coal, natural gas and nuclear.

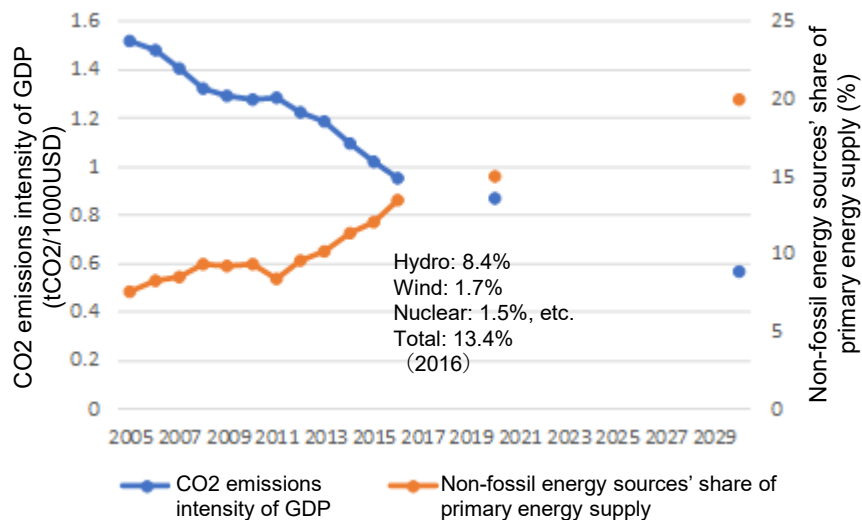
● Domestic policy

- The Department of Energy has demanded a preferential cost measure for coal and nuclear power plants, while the Federal Energy Regulatory Commission has refused to work out such rule. The DOE has also sought a measure to require grid operators to purchase electricity from these plants, though it may give it up.
- A waiver to California for its emission standards for motor vehicles revoked?



(Source) UNFCCC GHG Data

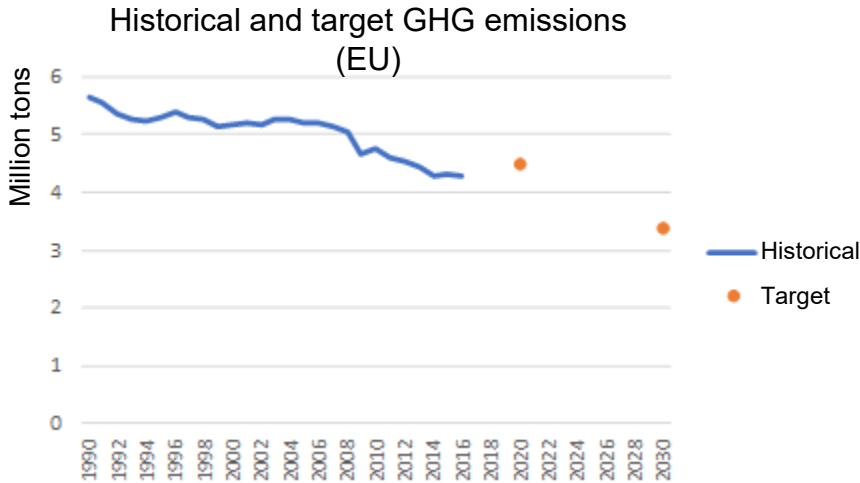
- A national carbon emissions trading system for the power generation sector will be launched in 2020.
- The scope could be expanded to key emitters such as cement, iron and steel, aluminum, and petrochemical.
- China achieved its 2020 target of cutting the CO2 emissions intensity of GDP by 40-45% below 2005 levels three years ahead of schedule.



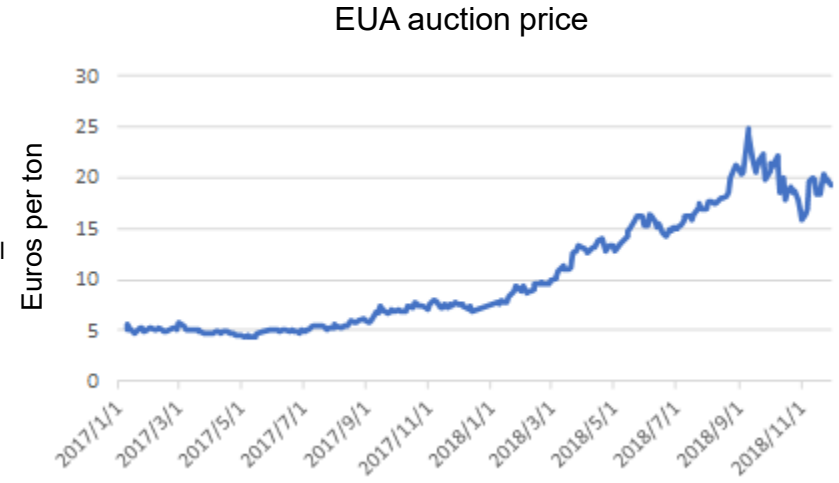
- In May 2018, the government announced “a notice on solar PV power generation,” lowering subsidies and purchasing prices for renewable energy electricity due to budget shortage.
- In November 2018, the National Development and Reform Commission and the National Energy Administration published a notice on “a quota system on renewable energy generation,” requiring electricity sales companies to purchase renewable energy electricity for a certain percentage of their electricity supply from January 2019.
- How would the Chinese government policy changes influence China itself and other countries where solar power plants were constructed through China’s solar panel imports?

(Sources) IEA, CO2 Emissions from Fuel Combustion, World Energy Balances; China’s National Bureau of Statistics

- After the agreement reached on the revised Renewable Energy and Energy Efficiency Directives in June 2018, Miguel Arias Canete, European commissioner for Climate Action and Energy, said that the EU would begin the process to raise its 2030 GHG target to reduce emissions from 40% to 45% compared to 1990 levels.
- In August 2018, German Chancellor Angela Merkel said that she was not so happy about this new proposal.
- In November 2018, a draft long-term strategy was adopted by the European Commission.



(Source) UNFCCC GHG Data

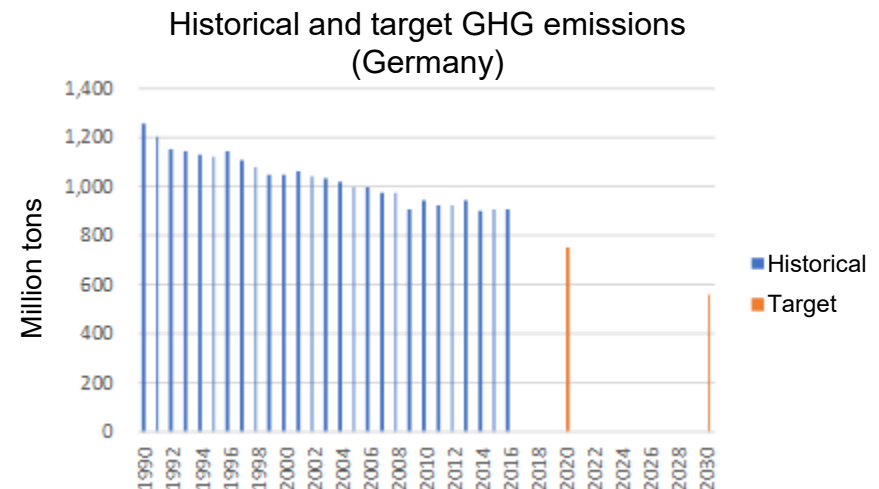


(Source) EEX, Emission Spot Primary Market Auction Report

- In June 2018, Germany established the Commission on Growth, Structural Change and Employment (Coal Commission) to consider the following measures:
 - Measures for the social and structural development of brown coal regions and for financial security;
 - Measures to help the energy sector achieve the 40% reduction target for 2020 “as much as possible”;
 - Measures that enable the energy sector to achieve its 2030 emission reduction target of 61-62% “based on a comprehensive impact assessment” (including “suitable” measures for the share of coal-based power generation and a plan for its phase out).

- In France, the so-called yellow vest movement emerged against an increased carbon tax in November 2018.

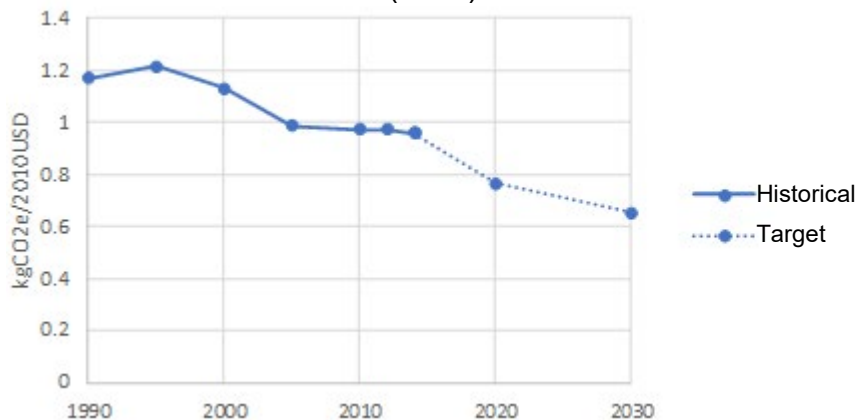
- In October 2018, the Commission recommended measures to create jobs.
- The draft suggests compensation payments to thermal power plants for retired capacities and a carbon pricing on fuel for transportation and heating to fund the compensation.



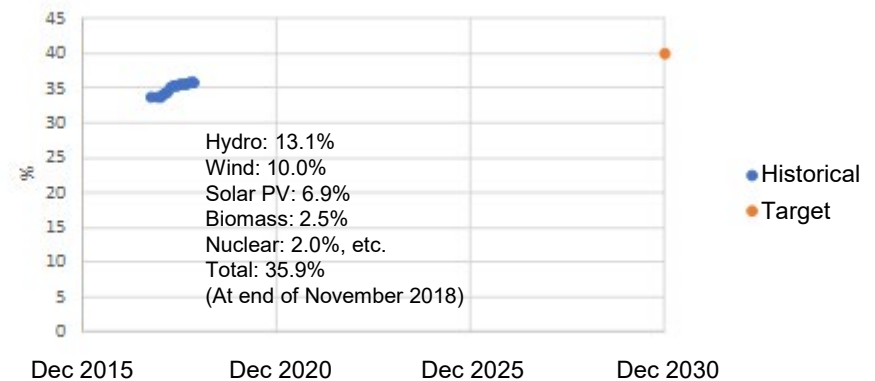
(Sources) UNFCCC GHG Data, Klimaschutzplan 2050

- India plans to submit its Second Biennial Update Report to the UNFCCC by December 2018
- The report notes India has cut its GHG emission intensity per unit GDP by 21% below 2005 levels by 2014.
- At this rate, India could fulfill its Paris Agreement commitment of reducing the intensity by 33-35% ahead of the 2030 deadline.
- As of March 2018, 35% of India's power generation capacity is non-fossil fuel-based.
- The country could achieve its commitment of turning 40% of the power capacity to non-fossil fuel sources also well before 2030, by adding 17 to 23 GW of non-fossil capacity.

Historical and target GHG emission intensity of GDP (India)



Non-fossil energy share of installed power generation capacity



(Source) IEA, CO₂ Emissions from Fuel Combustion

(Source) Central Electricity Authority, Ministry of Power, Government of India, Installed Capacity Reports

4. Outlook in Japan

Japan

- Progress of the Global Warming Countermeasure Plan

	Reduction by FY2016 (Mt)	Estimated Reduction by FY2030 (Mt)	%Progress
Energy efficiency measures	28.57	176.77	16.2
Industry sector	12.94	68.70	18.8
Commercial and other sectors	8.61	52.16	16.5
Residential sector	5.81	31.21	18.6
Transport sector	1.22	24.70	4.9
Renewable electricity	26.65	86.67	30.7
Decreased CO2 emission factor in power sector	18.00	163.00	11.0
Fluorinated gases	0.11	47.85	0.2

(Source) Ministry of Economy, Trade and Industry, "The Progress of Countermeasures by FY2016"

- Renewable electricity is making steady progress, but actions against its increasing cost must be considered, particularly the increasing burden on households.

- Consideration of a long-term strategy under the Paris Agreement

