

Renewable Energy Law and Policy and Trade Regime: Challenges Towards a Greener Economy

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- Renewable Energy Expansion as a **key for tackling climate change and greening economy and development**
- Possible conflict between measures to enhance renewable energy and trade regime:
Ontario FIT case
- Some remarks

The Future We Want (Rio+20 outcome)

- Section on Energy
 - We recognize that improving energy efficiency, increasing the share of renewable energy and cleaner and energy-efficient technologies are important for sustainable development, including in addressing climate change (para. 128).
 - Launching of the initiative by the Secretary-General on Sustainable Energy for All, which focuses on access to energy, energy efficiency and renewable energies. We are all determined to act to make sustainable energy for all a reality and, through this, help to eradicate poverty and lead to sustainable development and global prosperity (para. 129).

Proposed SDG

- Goal 7. Ensure access to affordable, reliable, sustainable and modern energy for all
 - 7.1 By 2030, ensure universal access to affordable, reliable and modern energy services
 - 7.2 By 2030, increase substantially the share of renewable energy in the global energy mix
 - 7.3 By 2030, double the global rate of improvement in energy efficiency
 - 7.a By 2030, enhance international cooperation to facilitate access to clean energy research and technology, including renewable energy, energy efficiency and advanced and cleaner fossil-fuel technology, and promote investment in energy infrastructure and clean energy technology
 - 7.b By 2030, expand infrastructure and upgrade technology for supplying modern and sustainable energy services for all in developing countries, in particular least developed countries and small island developing States

People without access to electricity by region

	2009			2030		
	Rural	Urban	Share of population	Rural	Urban	Share of population
Africa	466	121	58%	539	107	42%
Sub-Saharan Africa	465	121	69%	538	107	49%
Developing Asia	595	81	19%	327	49	9%
China	8	0	1%	0	0	0%
India	268	21	25%	145	9	10%
Rest of developing Asia	319	60	36%	181	40	16%
Latin America	26	4	7%	8	2	2%
Middle East	19	2	11%	5	0	2%
Developing countries	1 106	208	25%	879	157	16%
World*	1 109	208	19%	879	157	12%

*Includes countries in the OECD and Eastern Europe/Eurasia.

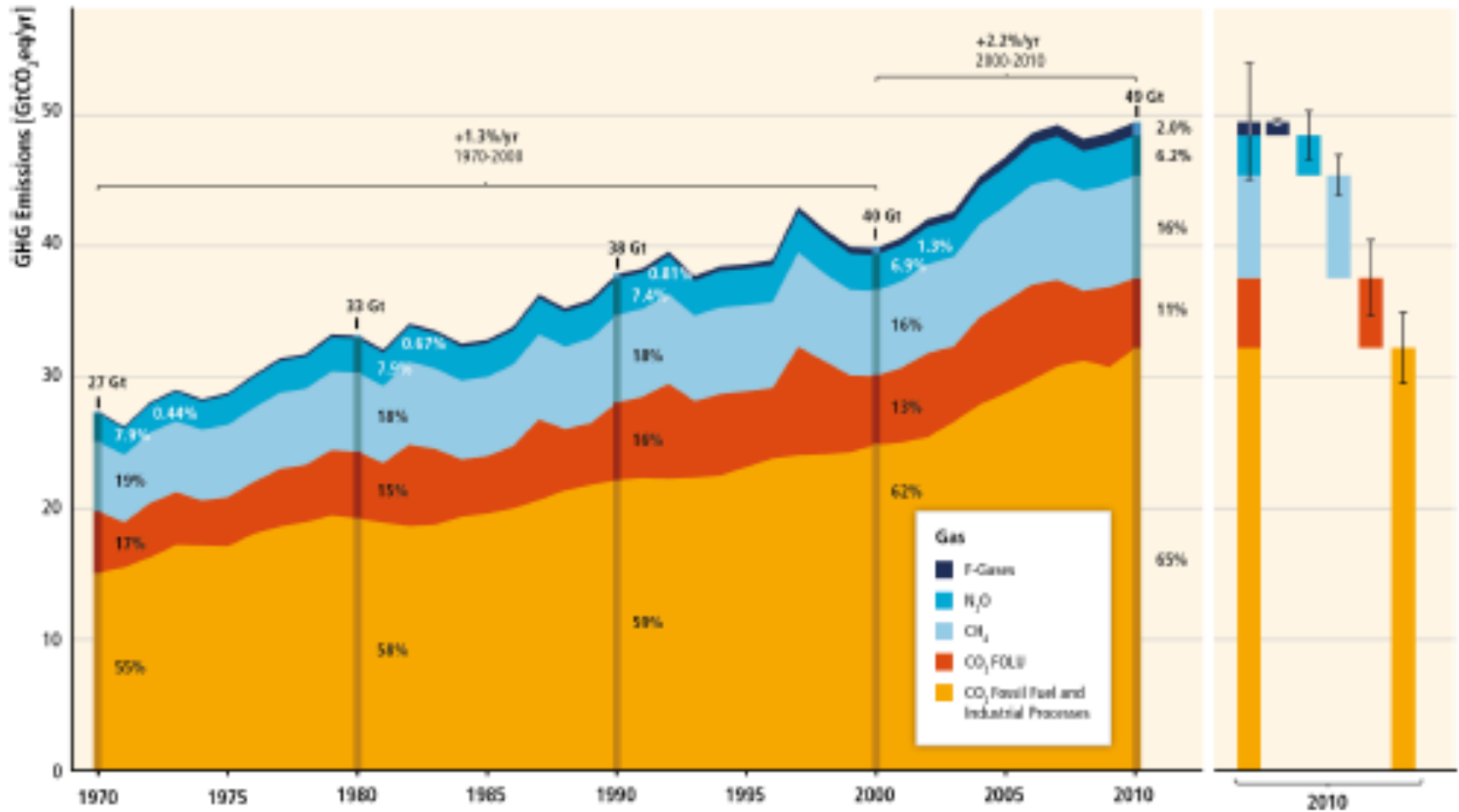
Enhancing renewable energy

- Renewable energy
 - Sufficient physical potential globally
 - multiple benefits from local to global level
 - Tackling **climate change**
 - Enhancing **self sufficiency** of energy
 - Reducing payment for fossil fuels from oversea
 - Ensuring international competitiveness
 - **Creating employments**
 - **Revitalizing rural areas**
 - Ensuring energy in case of **disaster**

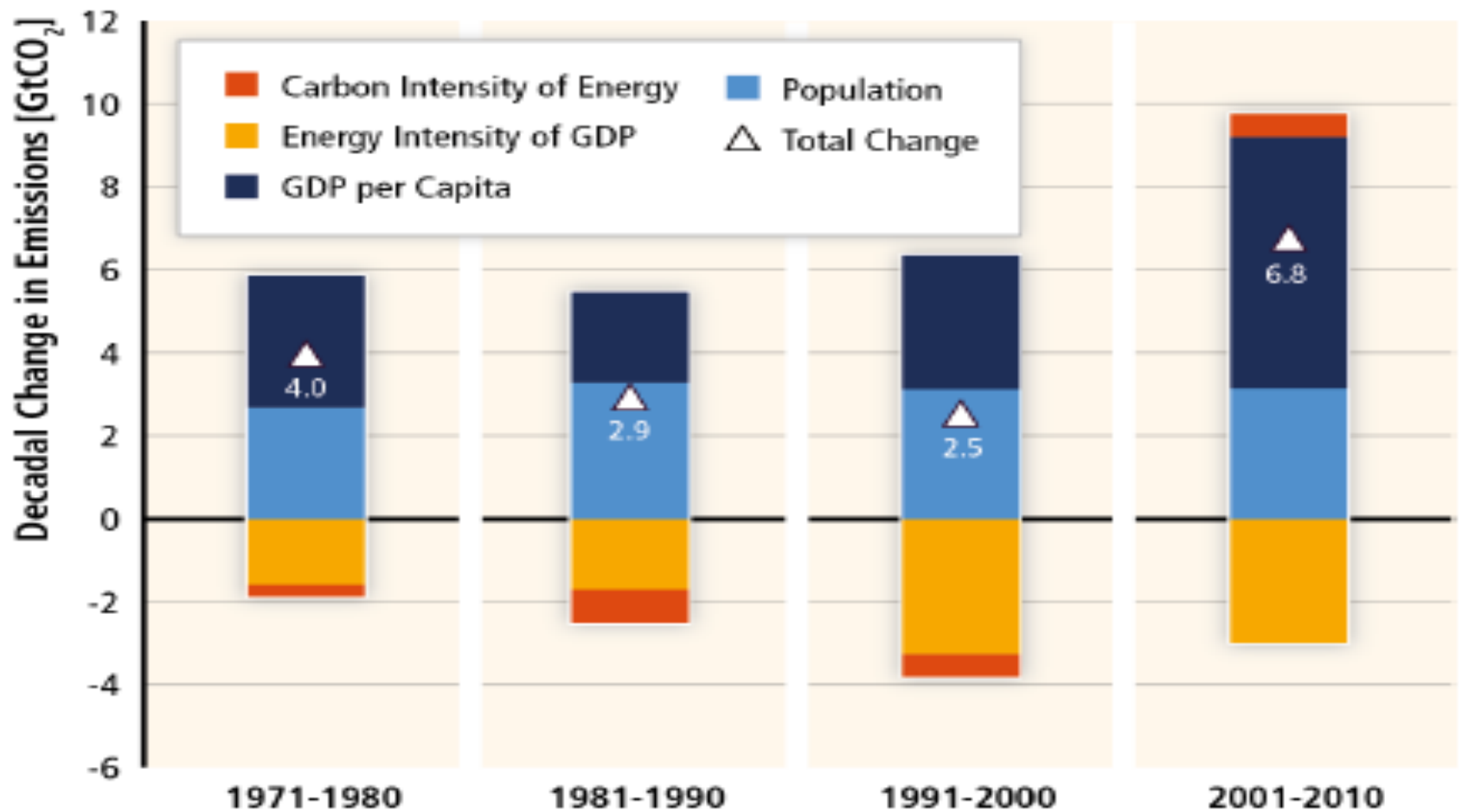
IPCC AR5: Transformation of energy sector needed

- Scenarios reaching atmospheric concentration levels of about 450 ppm CO₂eq by 2100 (consistent with a likely chance to keep temperature change below 2°C relative to pre-industrial levels) are characterized by lower global GHG emissions in 2050 than in 2010, 40% to 70% lower globally, and emissions levels near zero GtCO₂eq or below in 2100.
- At the global level, scenarios reaching 450 ppm CO₂eq are also characterized by more rapid improvements of energy efficiency, a tripling to nearly a quadrupling of the share of zero- and low-carbon energy supply from renewables, nuclear energy and fossil energy with carbon dioxide capture and storage (CCS), or bioenergy with CCS (BECCS) by 2050.
 - These scenarios describe a wide range of changes in land use.

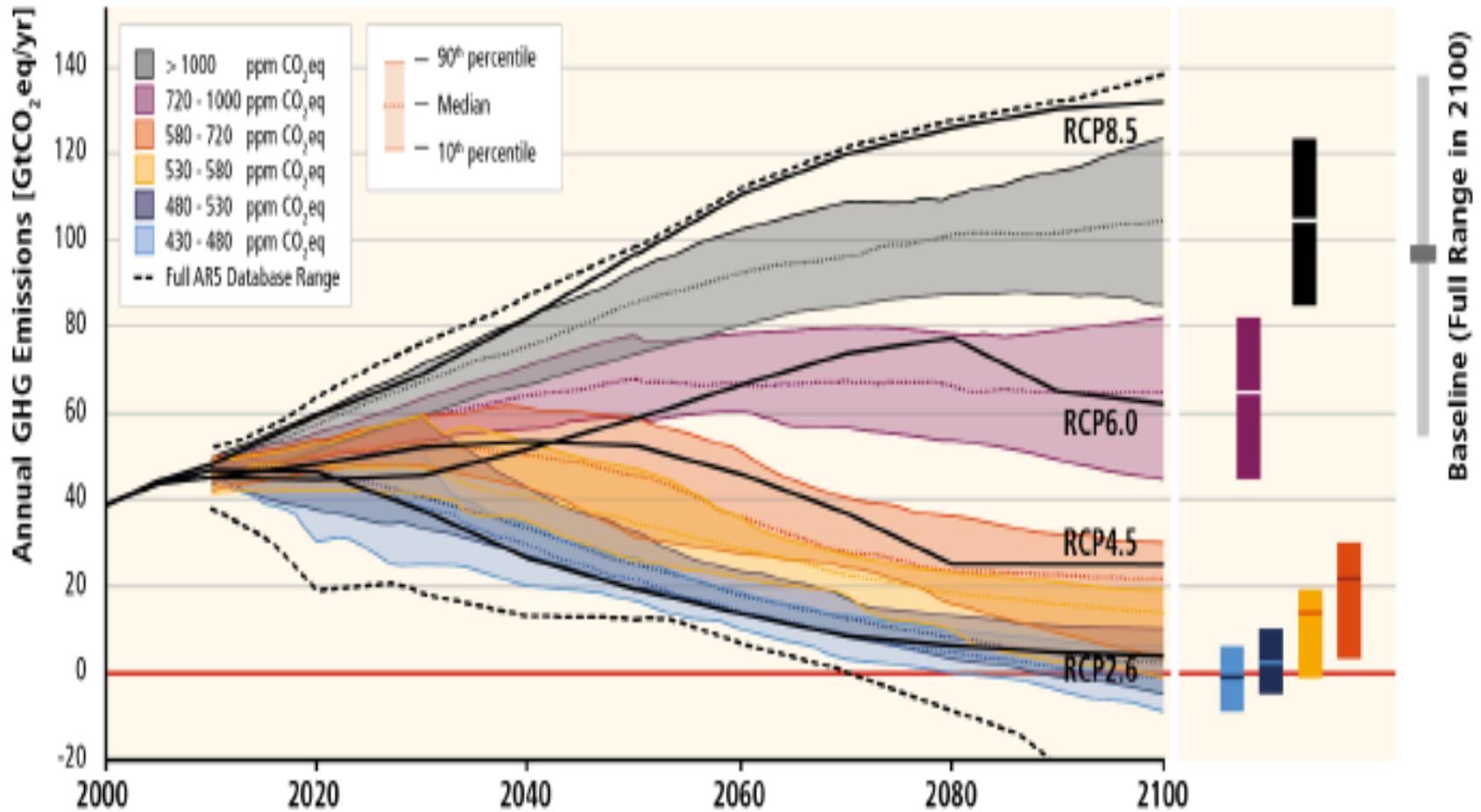
Total GHG emission by gas 1970-2010



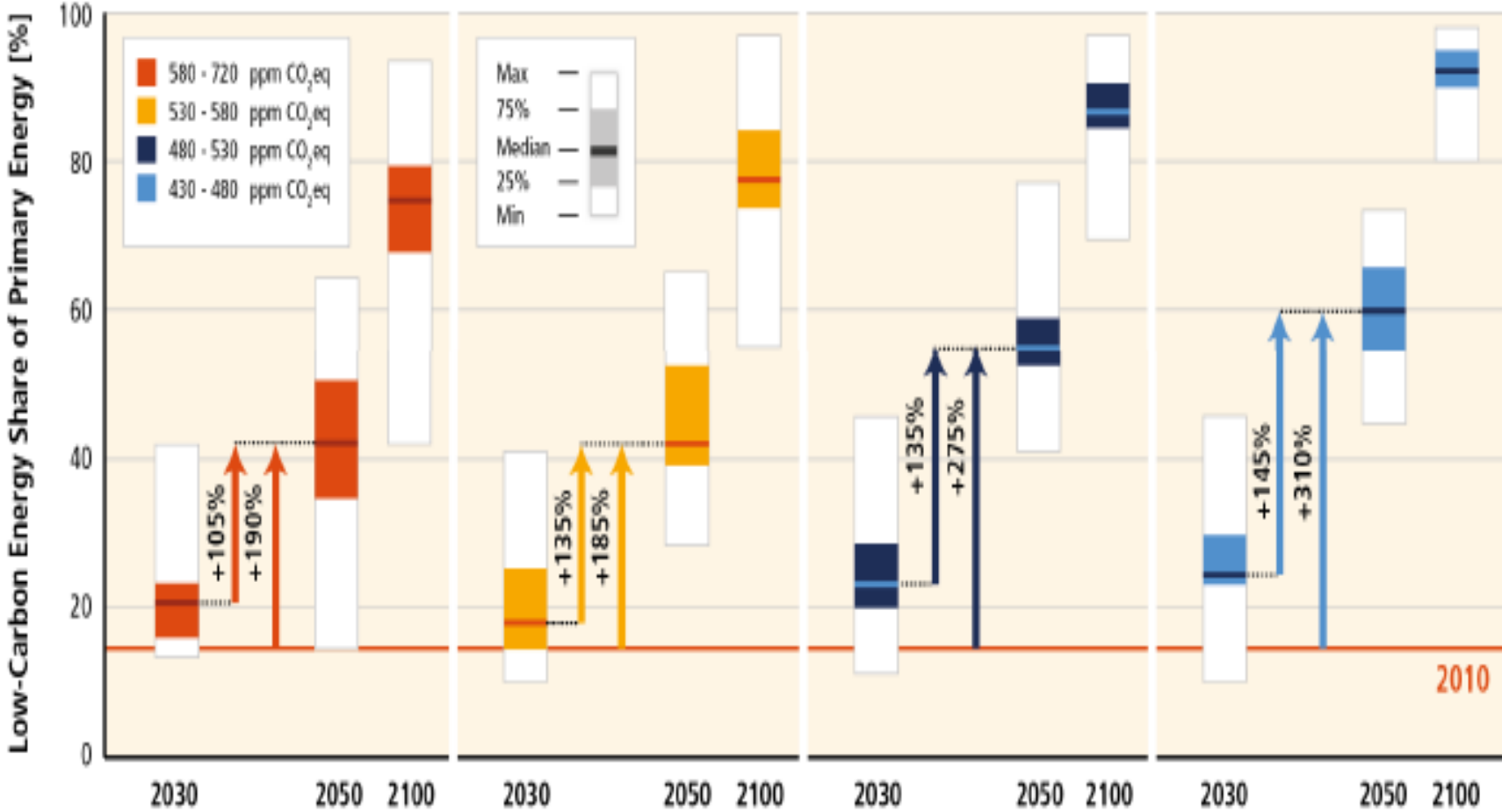
Decomposition of the change in global CO₂ emissions from fossil fuel combustion



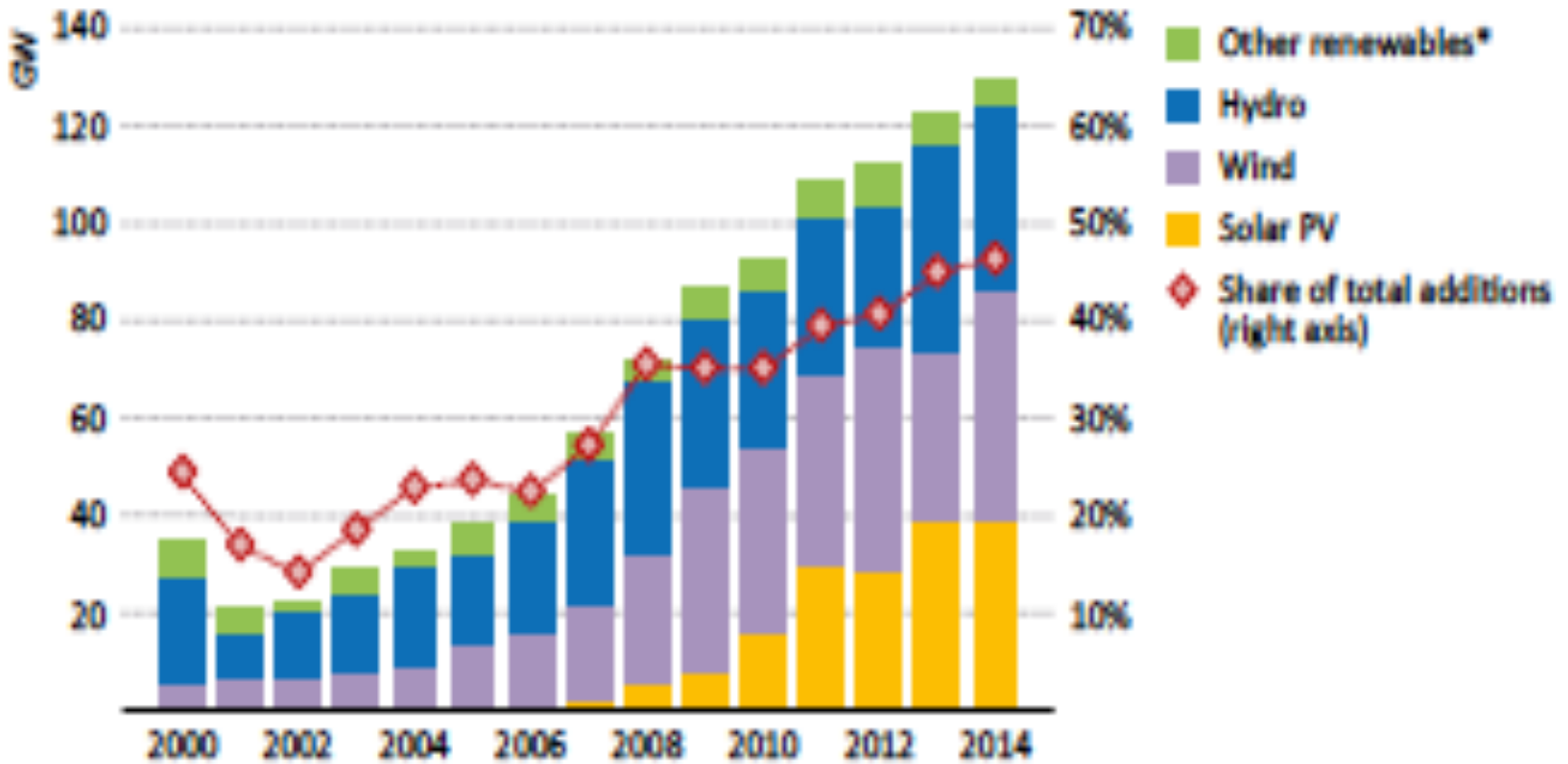
GHG Emissions Pathways 2000-2100



Upscaling of low carbon energy supply

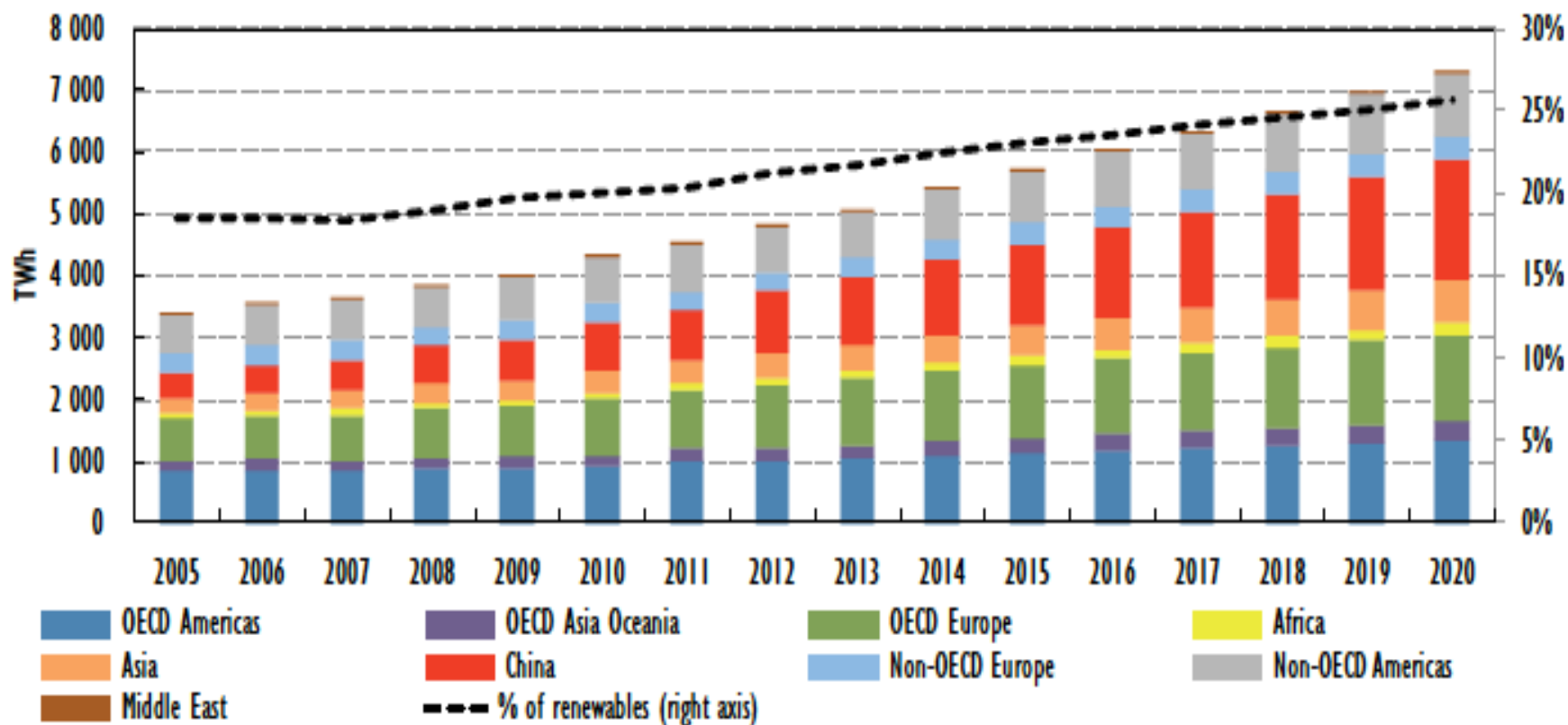


Global Renewable based capacity by type



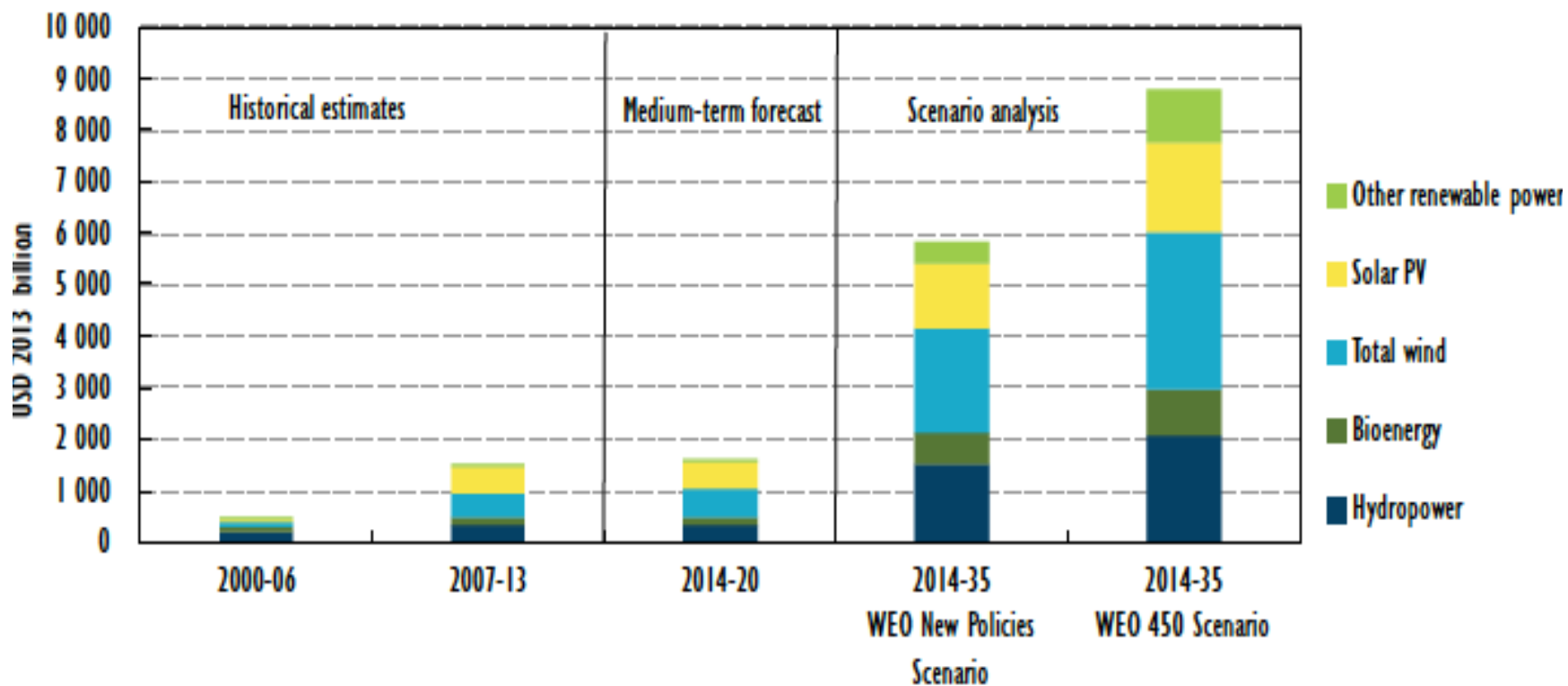
* Includes geothermal, marine, bioenergy and concentrating solar power.

Global Renewable electricity production by region



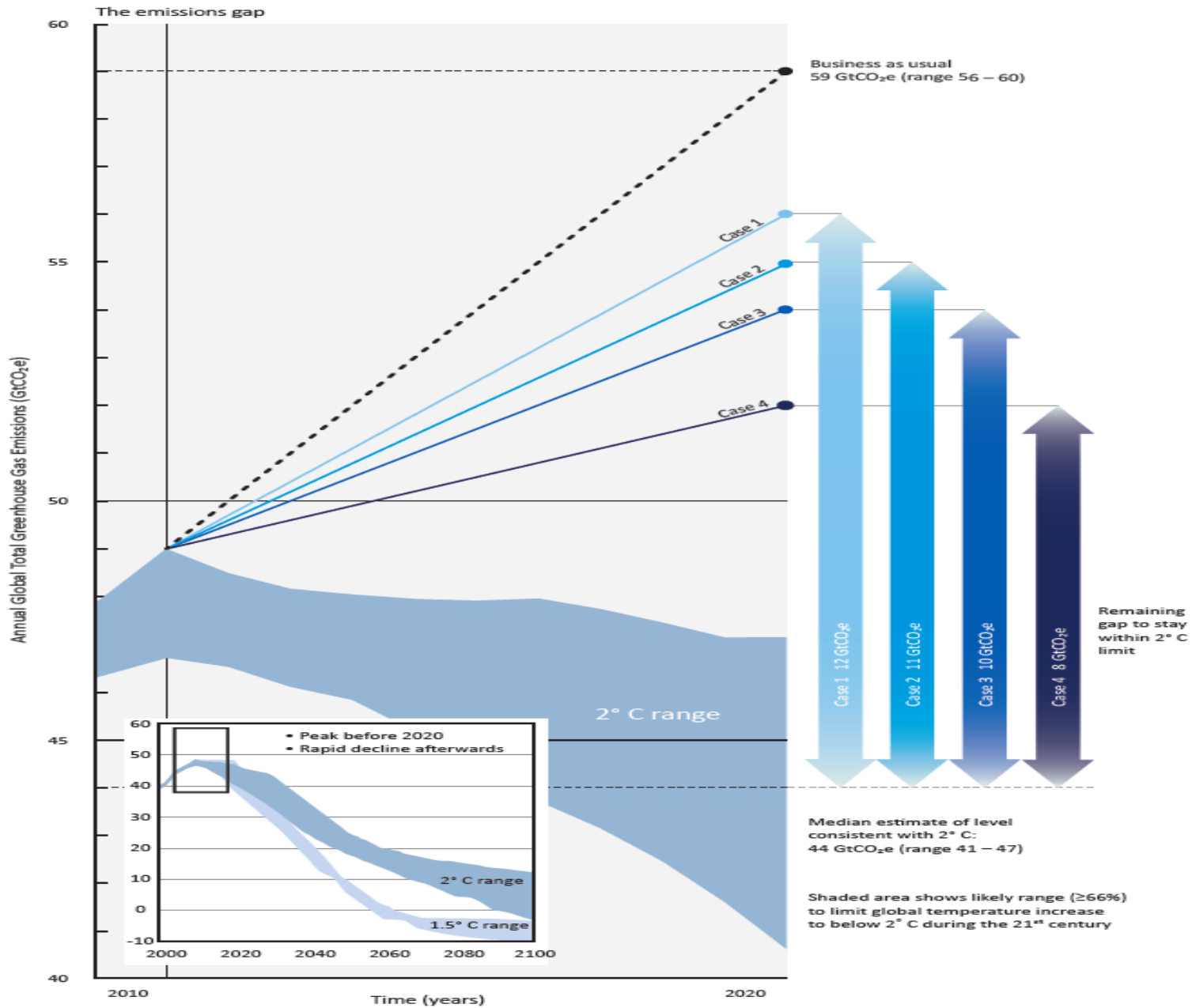
Notes: unless otherwise indicated, all material in figures and tables in this chapter derive from International Energy Agency (IEA) data and analysis. Hydropower includes pumped storage; the onshore and offshore wind split is estimated; total generation is gross power generation.

Cumulative investment in new renewable power capacity



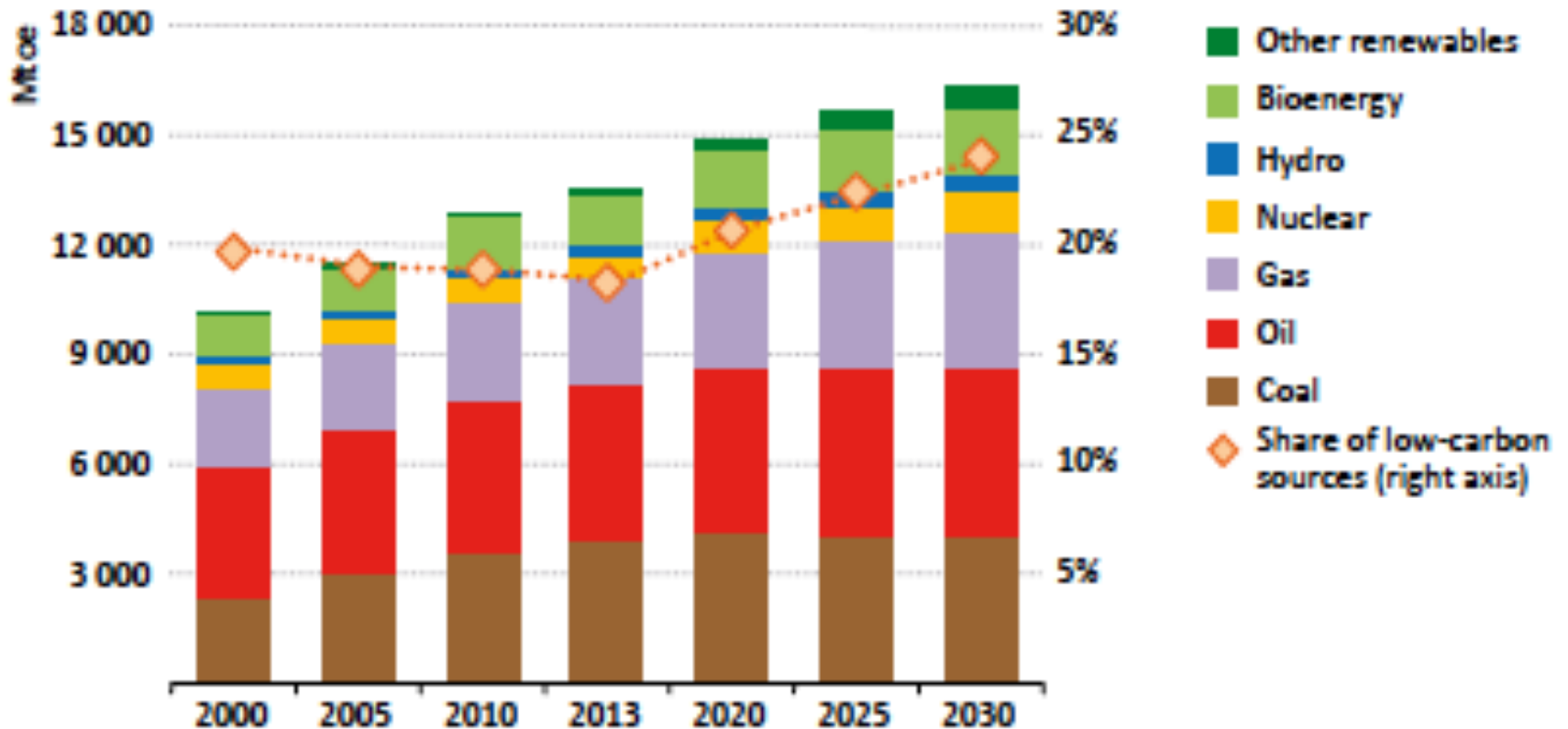
Note: New Policies and 450 Scenario data are reported in USD 2012 billion.

Sources: 2014-20 investment is derived from *MTRMR 2014* estimates, while New Policies and 450 Scenario data are from IEA (2014c) *World Energy Investment Outlook*, OECD/IEA, Paris.



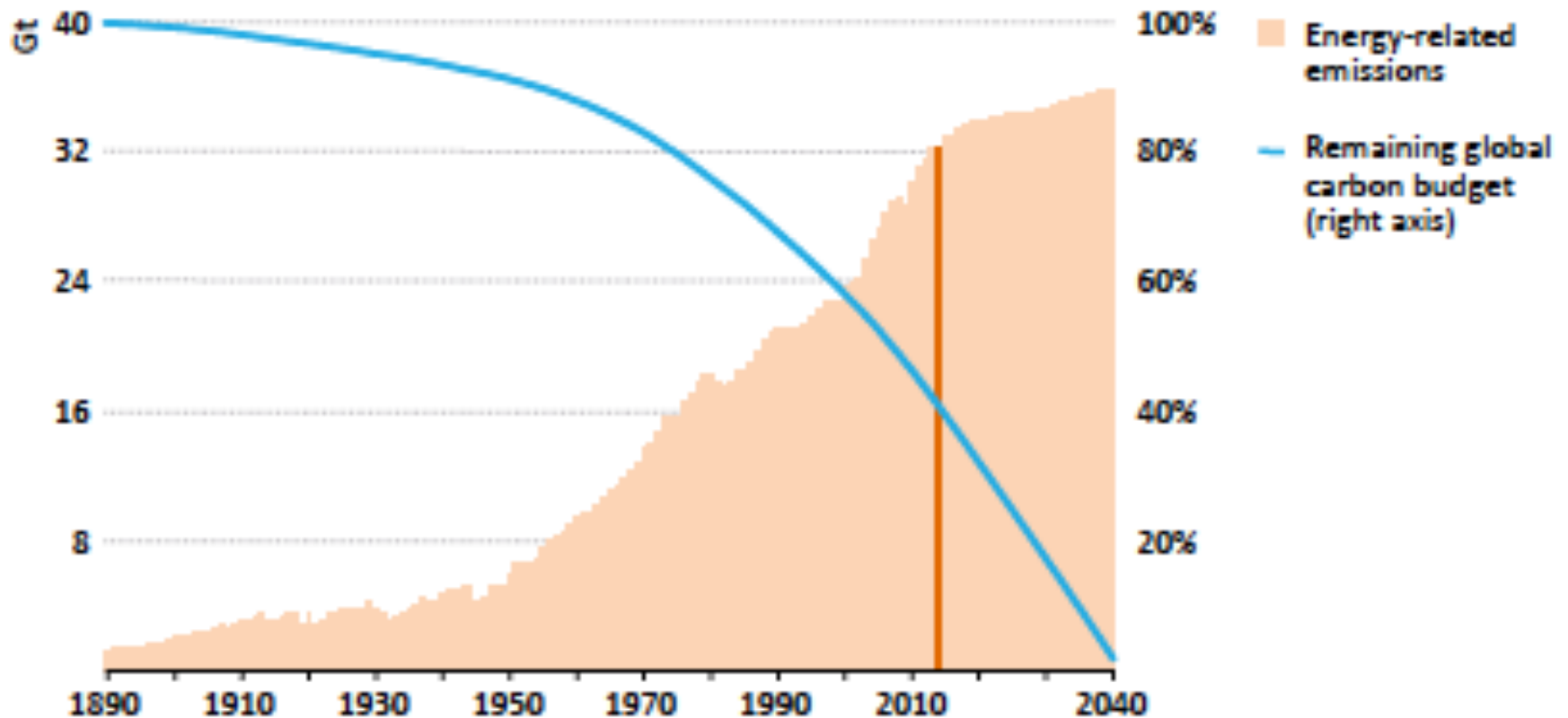
Source: UNEP (2013)

Global primary energy demand by type in the INDC



Note: "Other renewables" includes wind, solar (photovoltaic and concentrating solar power), geothermal, and marine.

Global energy related CO2 emissions in the INDC Scenario



Sources: IPCC and IEA data; IEA analysis.

Source: OECD/IEA 2015

Cases related to renewables before WTO

- Reflecting expanding market of renewables, increasing number of requests for consultation relating to renewable energy related measures have been brought before the WTO dispute settlement body.
 - **Canada – Renewable Energy case, brought by Japan (2010)(DS412) and EU (2011) (DS426): Ontario FIT case**
 - Panel report circulated on 19 December 2012 and Appellate Body Report on 6 May 2013.
 - China – Measures concerning wind power equipment, brought by the US (2011)(DS419)
 - Consultation requested on 22 December 2010
 - EU and certain member states - Certain Measures Affecting the Renewable Energy Generation Sector, brought by China (2012)(DS452)
 - Consultation requested on 5 November 2012
 - India – Certain Measures Relating to Solar Cells and Solar Modules, brought by the US (2013) (DS456).
 - Jawaharlal Nehru National Solar Mission (“NSM”) for solar cells and solar modules.
 - Consultation requested on 6 February 2013; Panel composed on 24 September 2014; Panel expected to issue its report by late August 2015.
 - United States — Countervailing Duty Measures on Certain Products from China (Complainant: China)(2012) (DS437)
 - EU — Certain Measures on the Importation and Marketing of Biodiesel and Measures Supporting the Biodiesel Industry (Complainant: Argentina)(2013) (DS459)

Canada – Renewable energy case (1)

- **Feed-in Tariff (FIT) Scheme** is a policy tool characterized by a couple of key elements:
 - **guaranteed purchase price** for electricity **with long-term contracts**
 - **guaranteed grid access**
- More than 100 countries and provinces have introduced FIT by 2014 (REN, 2015).
- The province of Ontario introduced a FIT program under its Green Energy and Green Economy Act (2009)
 - With the aims of **eliminating coal-fired power generators through increasing renewable energy and creating jobs.**
 - In order to be eligible, the FIT program requires use of equipment of renewable energy generation facilities supplied from Ontario in specified amounts or proportions (Minimum Domestic Content level; **“made in Ontario” provision**).

Local content requirement under the Ontario FIT program

FIT projects >10kW			
Wind projects over 10 kW		Solar projects over 10 kW	
<i>Minimum domestic content level</i>	<i>Year of commercial operations</i>	<i>Minimum domestic content level</i>	<i>Year of commercial operations</i>
25 %	2009 to 2011	50 %	2009-2010
50 %	2012 and later	60 %	2011 and later

MicroFIT projects <10 kW	
Solar projects equal to or less than 10 kW	
<i>Minimum domestic content level</i>	<i>Year of commercial operations</i>
40 %	2009-2010
60 %	2011 and later

Canada – Renewable energy case (2)

- Ontario's achievements (Ontario Ministry of Energy, 2015)
 - Created **more than 20,000 clean energy jobs to date and is on track to creating more than 50,000.**
 - Contracted 4,600 megawatts (MW) in addition to 2,500 MW through the Green Energy Investment Agreement (GEIA)— expected to produce enough electricity each year to power 1.8 million homes;
 - Attracted **over \$20 billion, along with \$7 billion from the GEIA, in private-sector investment to Ontario** during challenging economic times;
 - **Increased the amount of clean energy** in Ontario's supply mix;
 - Supported Ontario's plan to replace coal-fired generation, contributing to lower greenhouse gas emissions and better health for Ontarians.

Canada – Renewable energy case (3)

- Disputed points
 - “Made in Ontario” provisions are alleged as violation of the WTO agreements.
 - **GATT III-4: National treatment**
 - “The products of the territory of any contracting party imported into the territory of any other contracting party shall be accorded **treatment no less favourable than that accorded to like products of national origin in respect of all laws, regulations and requirements affecting** their internal sale, offering for sale, purchase, transportation, distribution or use....”
 - GATT Art. 3.8(a)
 - “The provisions of this Article shall not apply to laws, regulations or requirements **governing the procurement by governmental agencies of products purchased for governmental purposes** and not with a view to commercial resale or with a view to use in the production of goods for commercial sale.”
 - **Trade Related Investment Measures (TRIMs) Art. 2.1:**
 - “Without prejudice to other rights and obligations under GATT 1994, no Member shall apply any TRIM that is inconsistent with the provisions of Article III or Article XI of GATT 1994”
 - TRIMs: “investment measures related to trade in goods only” (TRIMs Art.1)
 - **Agreement on Subsidies and Countervailing Measures (SCM agreement)**

Canada – Renewable energy case (4)

- FIT scheme is consistent with the SCM agreement?
 - Whether the FIT is a “subsidy”? (Article 1.1)
 - “there is a financial contribution by a government or any public body within the territory of a Member”? or
 - “any subsidy, including any form of income or price support, which operates directly or indirectly to increase exports of any product from, or to reduce imports of any product into, its territory”?
 - AND
 - “a benefit is thereby conferred”?
 - AND
 - Specificity requirement (Articles 1.2 and 2)

Canada – Renewable energy case (5)

- FIT scheme is consistent with the SCM agreement?(2)
 - Whether the FIT is a “prohibited” subsidy?
 - (a) subsidies contingent, in law or in fact, whether solely or as one of several other conditions, upon export performance;
 - (b) **subsidies contingent**, whether solely or as one of several other conditions, **upon the use of domestic over imported goods**. (Article 3)

AB finding (1)

- The Minimum Required Domestic Content Levels prescribed under FIT scheme were inconsistent with TRIMS Agreement Art. 2.1 and GATT Art. III:4.
- FIT did not fall within the scope of the derogation under Art. III:8(a).
 - To qualify for this derogation, the product of foreign origin allegedly being discriminated against must be in a competitive relationship with the product purchased by the government. In these disputes, the product being procured by the Government of Ontario was electricity, whereas the foreign product suffering from discrimination due to the Minimum Required Domestic Content Levels under the measures at issue was electricity.

AB finding (2)

- The measures at issue constituted **financial contributions in the form of government purchases of goods** within the meaning of Art. 1.1(a)(1)(iii).
- In defining the “relevant market”, AB found necessary to undertaken **an analysis of demand-side and supply-side factors**. Since producers of wind- and solar PV-generated electricity did not compete with other electricity producers, because of differences in cost structures and operating costs, **the relevant market for the benefit comparison** was the market for wind- and solar PV-generated electricity, not the market for electricity generated from all sources of energy as the Panel concluded.
- AB was **unable to determine whether the measures conferred a benefit** within the meaning of Art. 1.1(b), due to the lack of a sufficient factual basis to complete the analysis.
- Therefore, there was **no finding as to whether the measures at issue were prohibited subsidies** under ASCM Arts. 3.1(b) and 3.2.

Renewables and trade regimes (1)

- Neither panel nor Appellate Body (AB) did **not conclude that FIT is per se the measure that violates the WTO agreements**. Neither Japan nor EU contended it, **especially as prohibited subsidies under the SCM agreement**.
- Their main concern is **local content requirements** under the FIT. How to design the scheme is critical to avoid potential conflict.
 - Much to be learnt from the precedents, such German scheme.
 - Remains potential compatibility issue with EU State aid guidelines (2014).

Renewables and trade regimes (2)

- Problem with the SCM agreement
 - No exemption clause for measures with legitimate policy objectives, such as environmental protection.
 - Art. 8 provides for some exemptions on assistance for research activities, assistance to disadvantaged regions (social cohesion), assistance to promote adaptation of existing facilities to new environmental requirements.
 - However, Art. 8 was expired.
 - No special treatment for developing countries.
 - SCM agreement is considered as the one not allowing the application of GATT Art. 20.
 - If only GATT and TRIMs were in question, Canada had had a possibility of invoking GATT Art. 20 (General exemptions) and had won the case.
- AB, in this Ontario FIT case, seems to implicitly try to accommodate trade rules especially SCM agreement with legitimate policy objective, ie. promotion of renewable energy and greener economy.
 - Criticized as a kind of norm creating by AB without clear legal basis in the WTO agreements
 - Some scholars suggest use of balance of interest test (Cosby et al.).

GATT Art.20

- “Subject to the requirement that such measures are not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail, or a disguised restriction on international trade, nothing in this Agreement shall be construed to prevent the adoption or enforcement by any contracting party of measures:
 - (b) necessary to protect human, animal or plant life or health;
 - (g) relating to the conservation of exhaustible natural resources if such measures are made effective in conjunction with restrictions on domestic production or consumption”

Renewables and trade regimes (3)

- Possible **conflict between jurisdictions (fragmentation)**.
 - ECJ judgment in C-379/98 PreussenElektra AG v Schleswag AG (2001)
 - Possible judgment under the NAFTA
 - Texas-based renewable energy developer Mesa Power Group initiated a complaint against Canada under the North American Free Trade Agreement (NAFTA).

Some remarks

- **Need to enhance synergies** between measures to promote renewable energy and trade law.
 - **How to Design the FIT** consistent with trade law.
 - How to **reflect consideration of legitimate policy objectives on trade rules**, especially SCM agreement.
- **Desirable to have ex ante international rules in addition to ex post solution by dispute settlement bodies.**
 - For the sake of legal certainty and predictability.
 - It would be difficult to expect such rule making by the WTO in light of current status of negotiation.
 - Any **possibility of contribution on the part of the UNEP?**

Thank you so much for your attention!

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