

Future investments in climate adaptation projects in Egypt and Africa



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at 3 PM



Future Projects Types to Reduce Climate Change Effects

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Adaption Vs Mitigation

ADAPTATION VS. MITIGATION

ADAPTATION

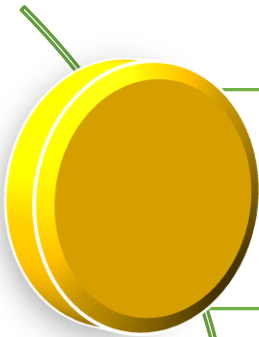
A variety of actions that are meant to reduce or compensate for or adapt to the adverse impacts that arise from changes in the Earth's climate

MITIGATION

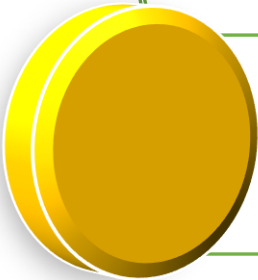
Actions or changes in societal behavior taken to reduce or eliminate greenhouse gas (GHG) emissions and/or to remove GHGs from the atmosphere to prevent significant adverse climate effects



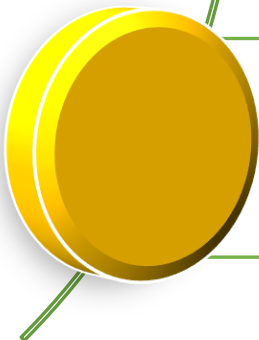
Presentation Outline



Causes and Risks of Climate Change Effects



Climate Adaption Practices and Projects



Success Drivers Toward Effective and Efficient Investments

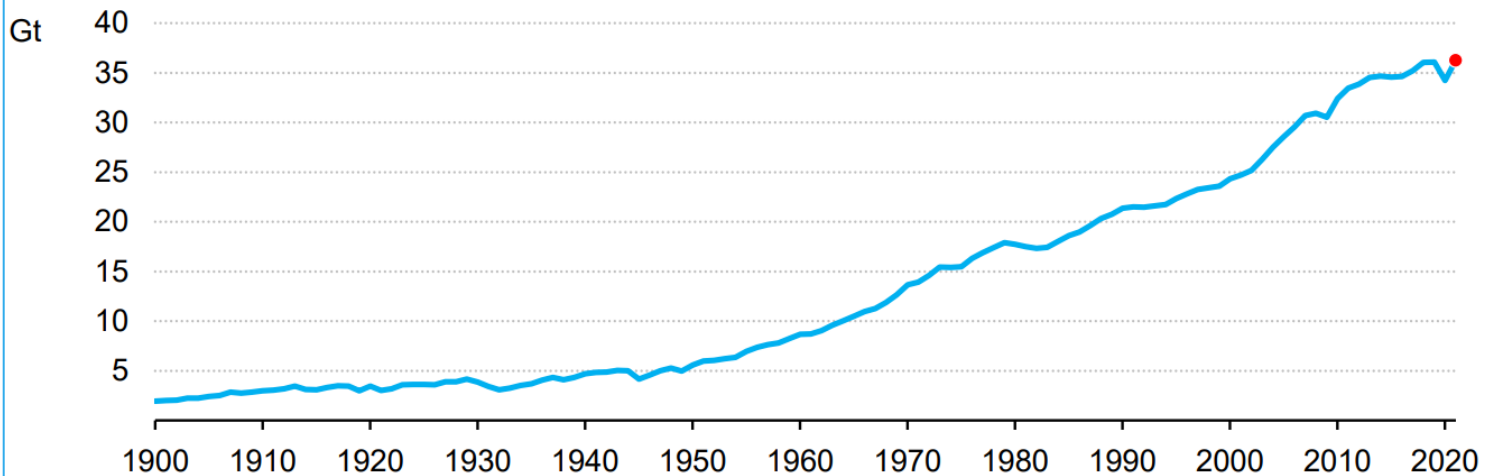


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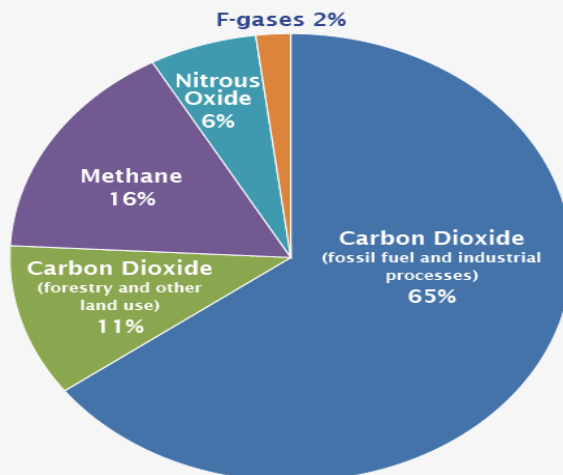
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Causes of Climate Change Effects

Total CO2 emissions from energy combustion and industrial processes and their annual change, 1900-2021



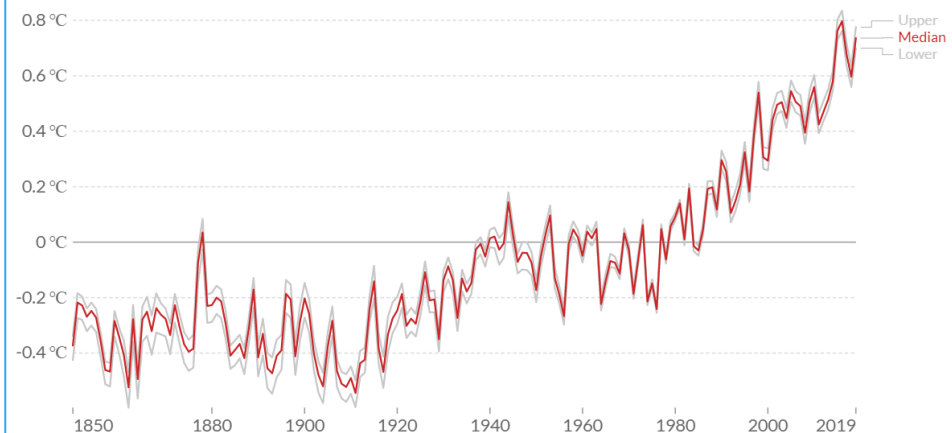
Global Greenhouse Gas Emissions by Gas



Average temperature anomaly, Global

Global average land-sea temperature anomaly relative to the 1961-1990 average temperature.

Change region

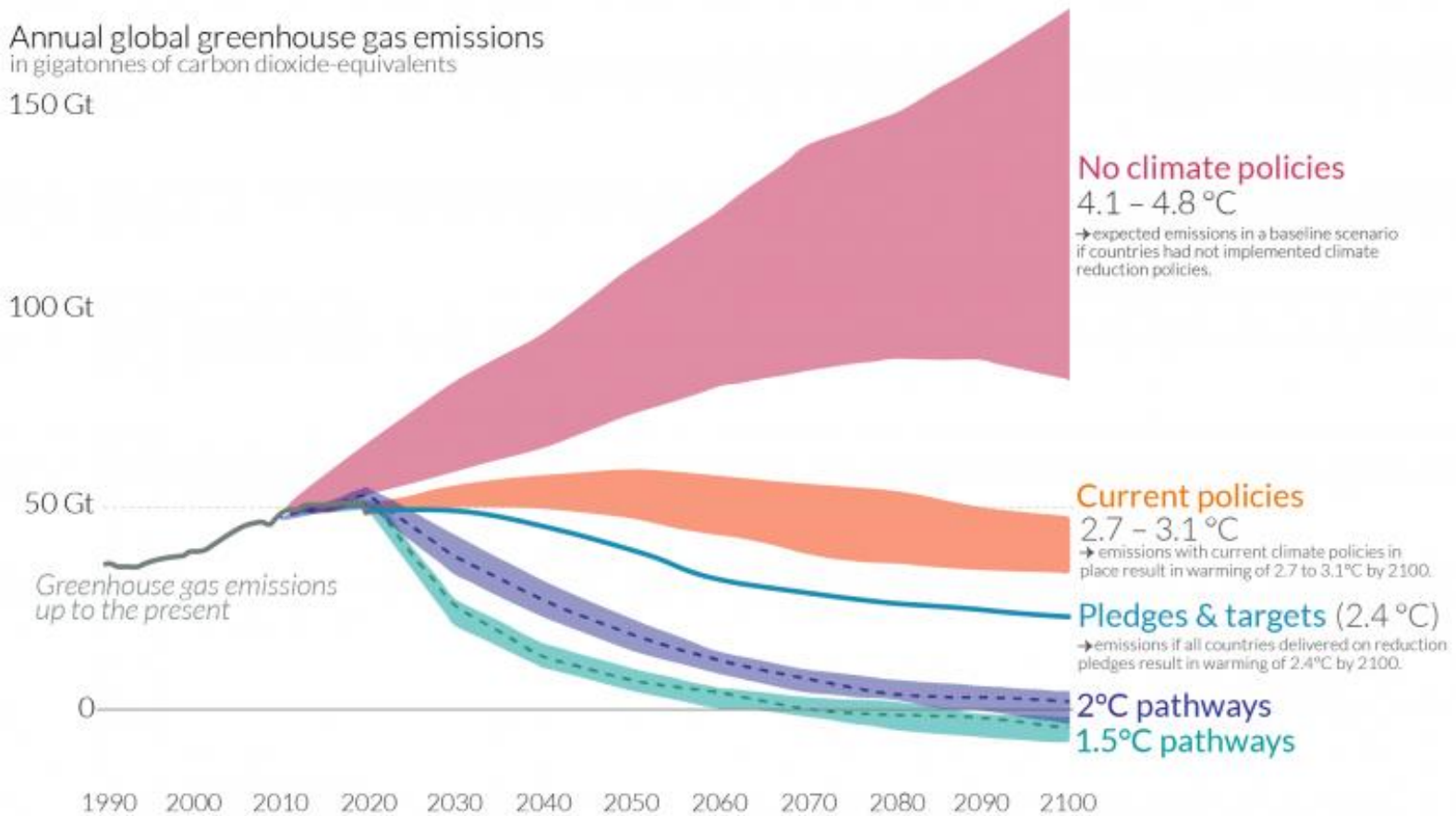




Risks of Climate Change Effects

Global greenhouse gas emissions and warming scenarios Our World in Data

- Each pathway comes with uncertainty, marked by the shading from low to high emissions under each scenario.
- Warming refers to the expected global temperature rise by 2100, relative to pre-industrial temperatures.



Data source: Climate Action Tracker (based on national policies and pledges as of May 2021).
OurWorldinData.org - Research and data to make progress against the world's largest problems.

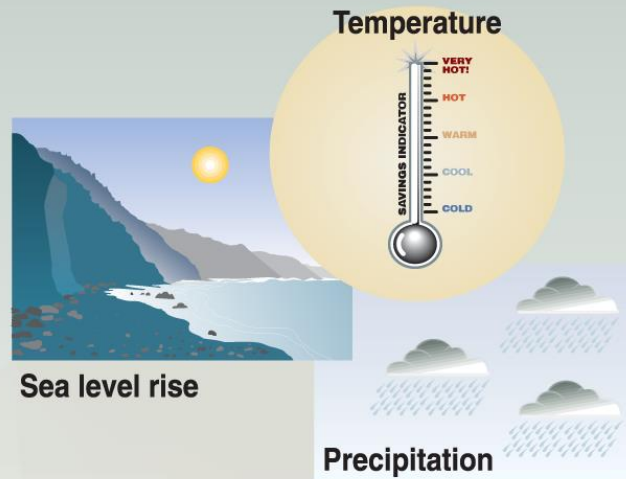
Last updated: July 2021.
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Potential climate changes impact



Impacts on...

Health



Weather-related mortality
Infectious diseases
Air-quality respiratory illnesses

Agriculture



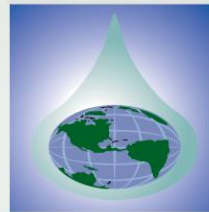
Crop yields
Irrigation demands

Forest



Forest composition
Geographic range of forest
Forest health and productivity

Water resources



Water supply
Water quality
Competition for water

coastal areas



Erosion of beaches
Inundation of coastal lands
additional costs to protect coastal communities

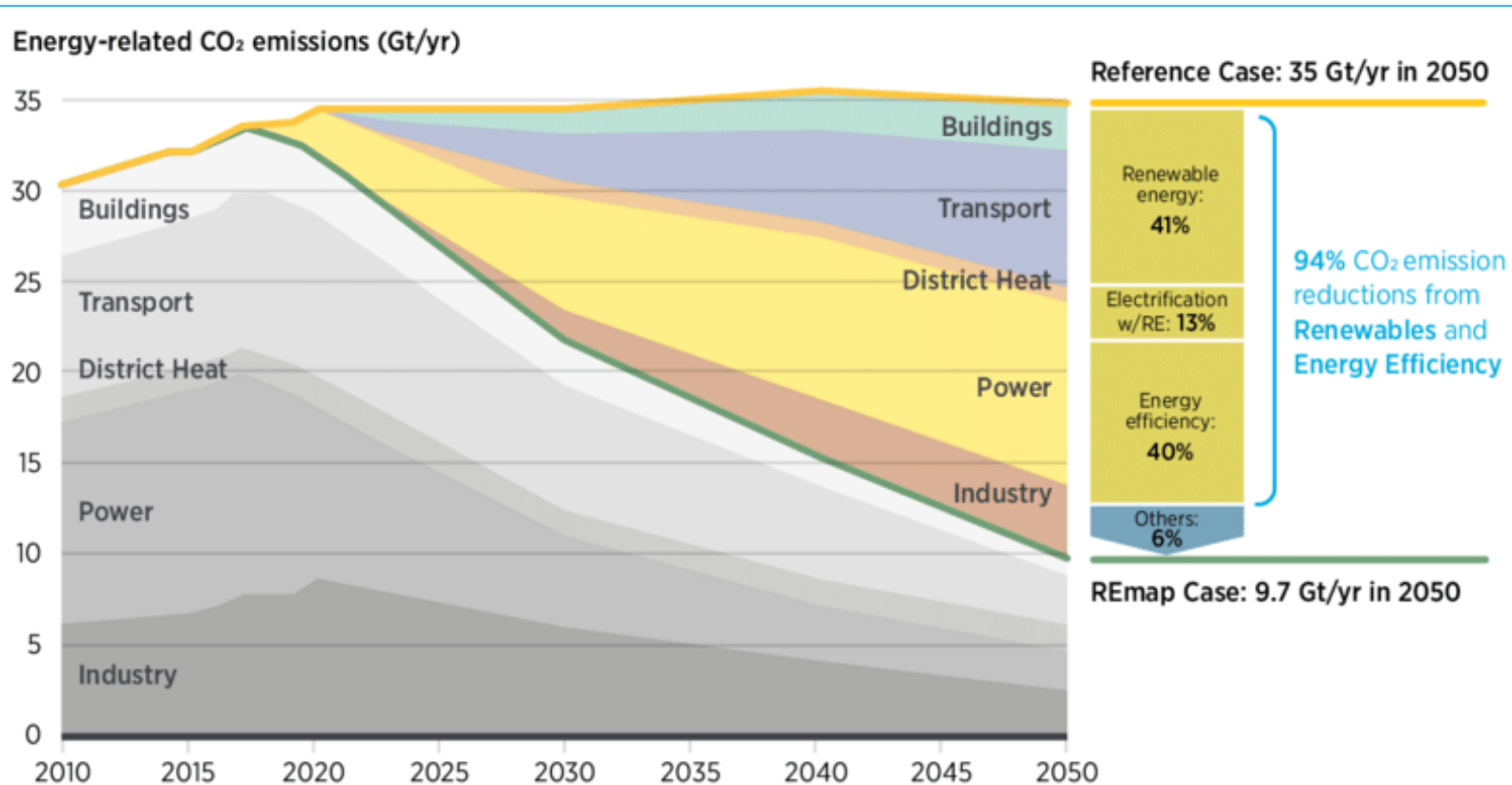
Species and natural areas



Loss of habitat and species
Cryosphere: diminishing glaciers



Climate Adaption Practices and Projects





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Climate Adaption Practices and Projects

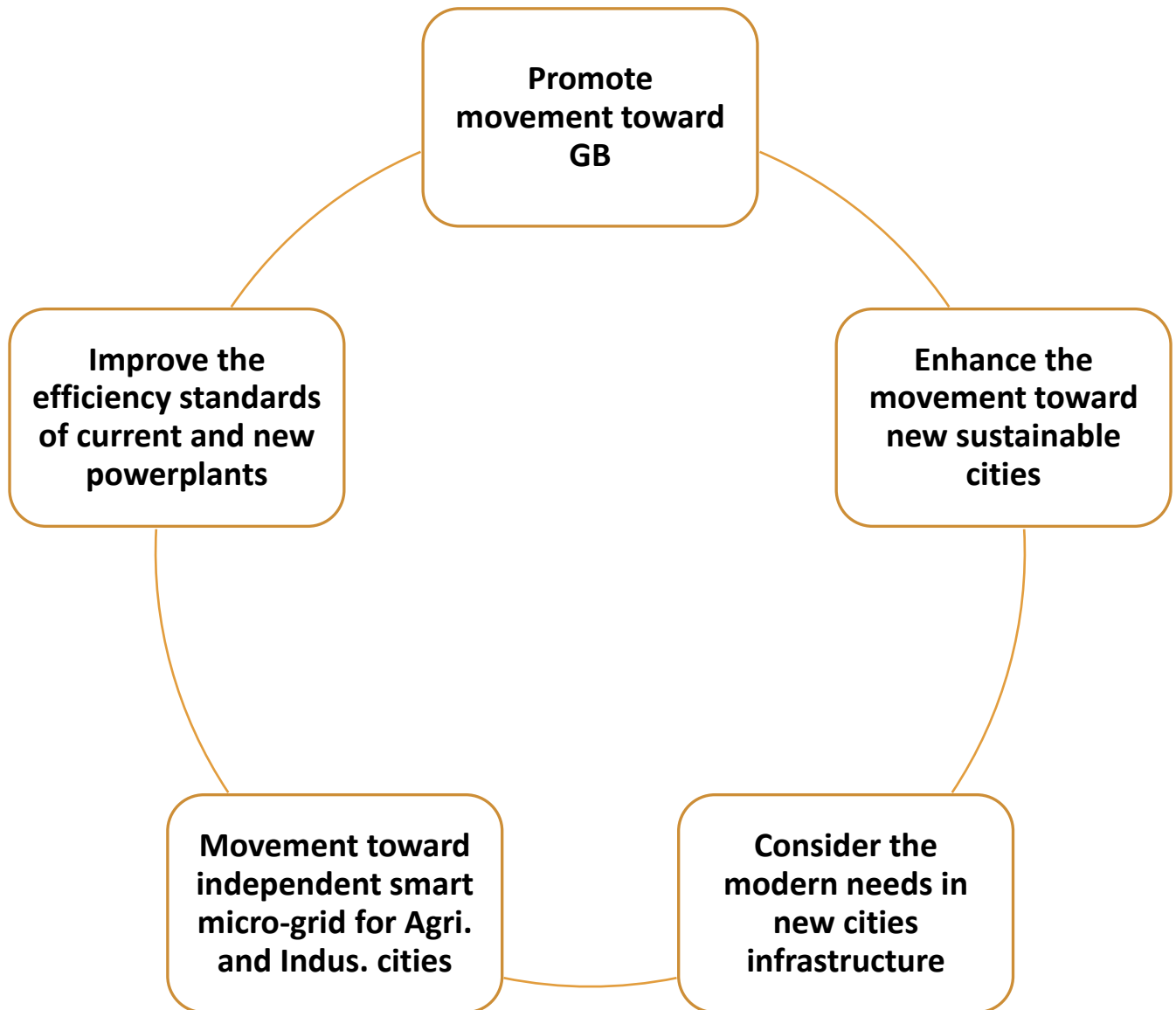
**Legislations
towards
integrated
specifications
with various
sectors**

**Utilizing Energy
Efficiency
Projects and
Practices**

**Installing
Renewable
Energy Projects**



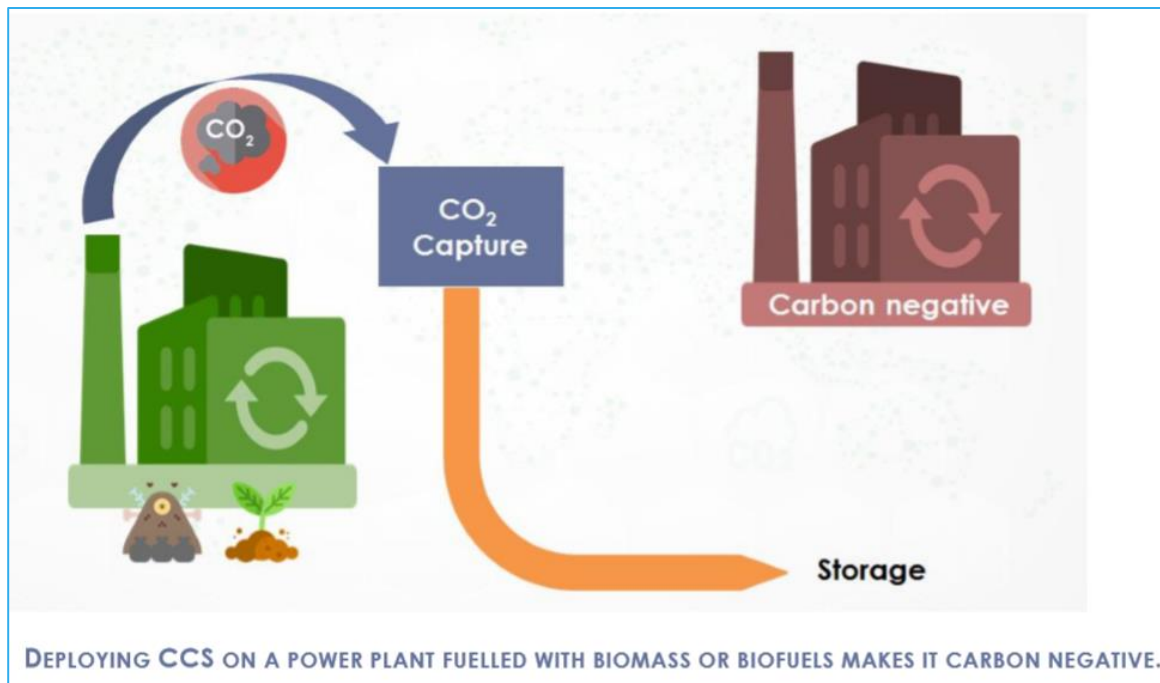
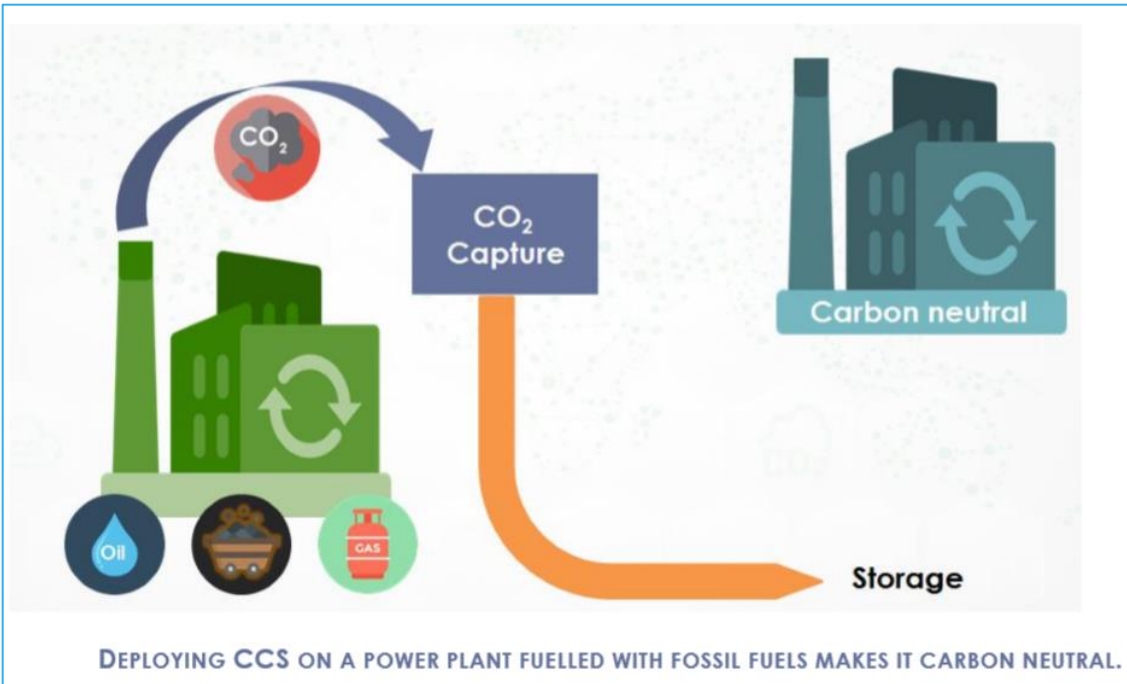
EE and RE Projects and Practices





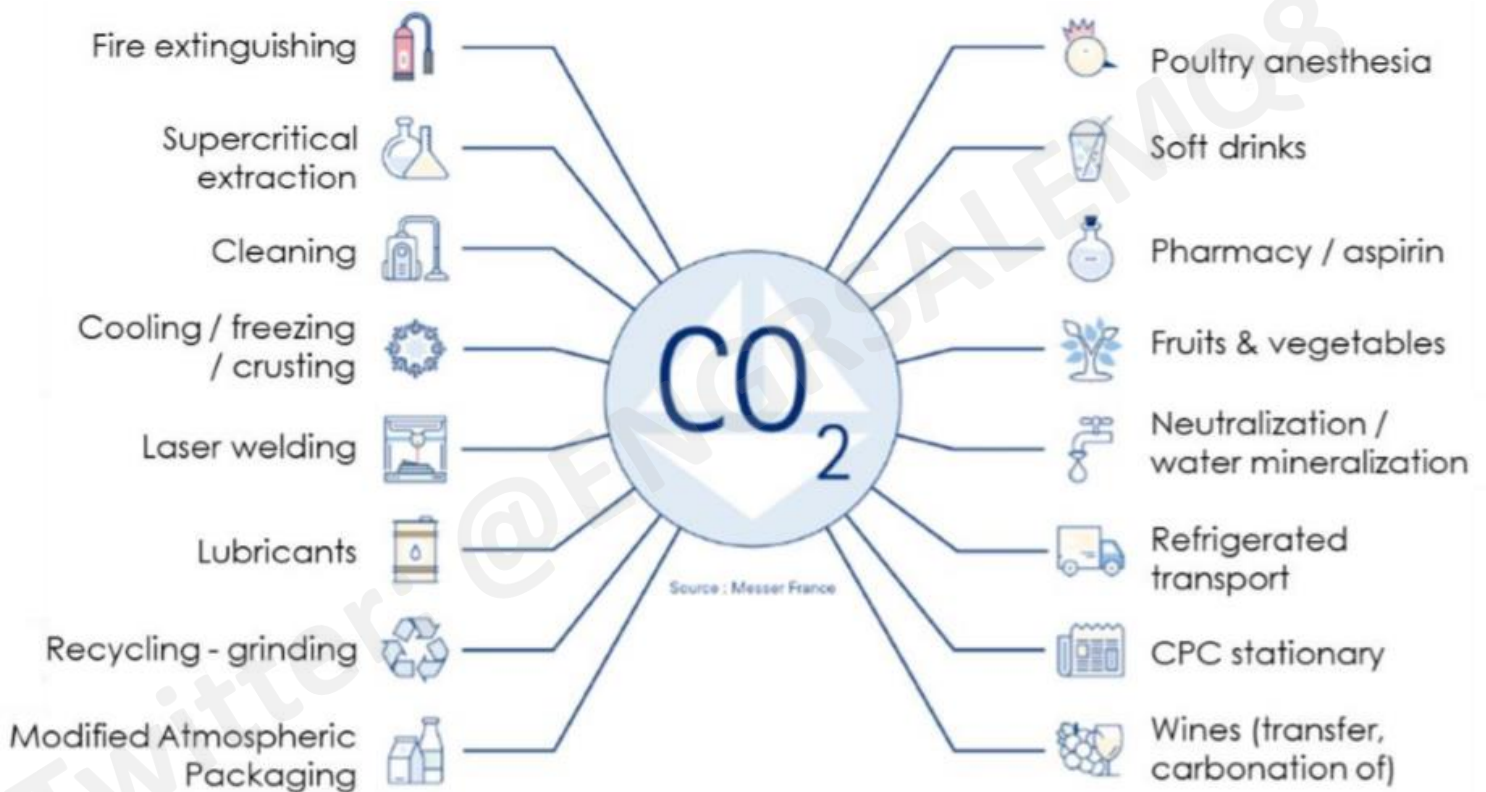
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Carbon Capture Storage: CCS

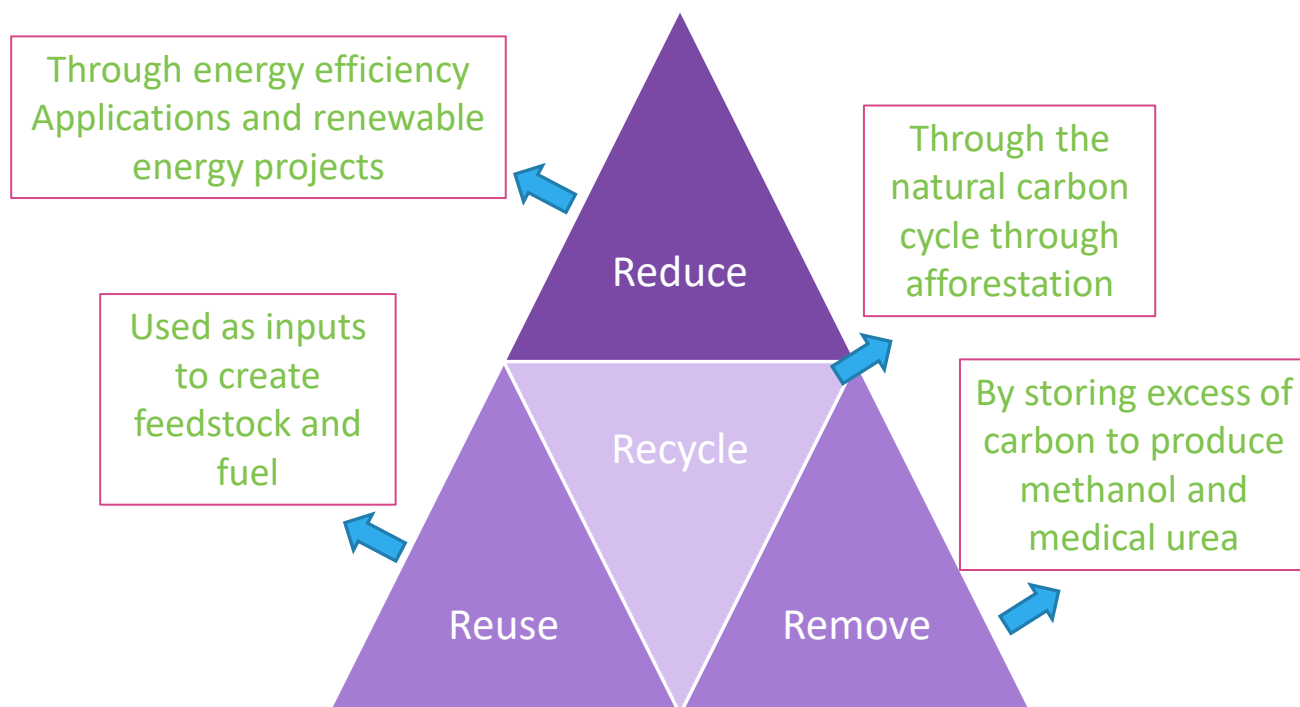


CO₂ UTILIZATION (SOURCE: TRANSLATED FROM MESSER FRANCE).



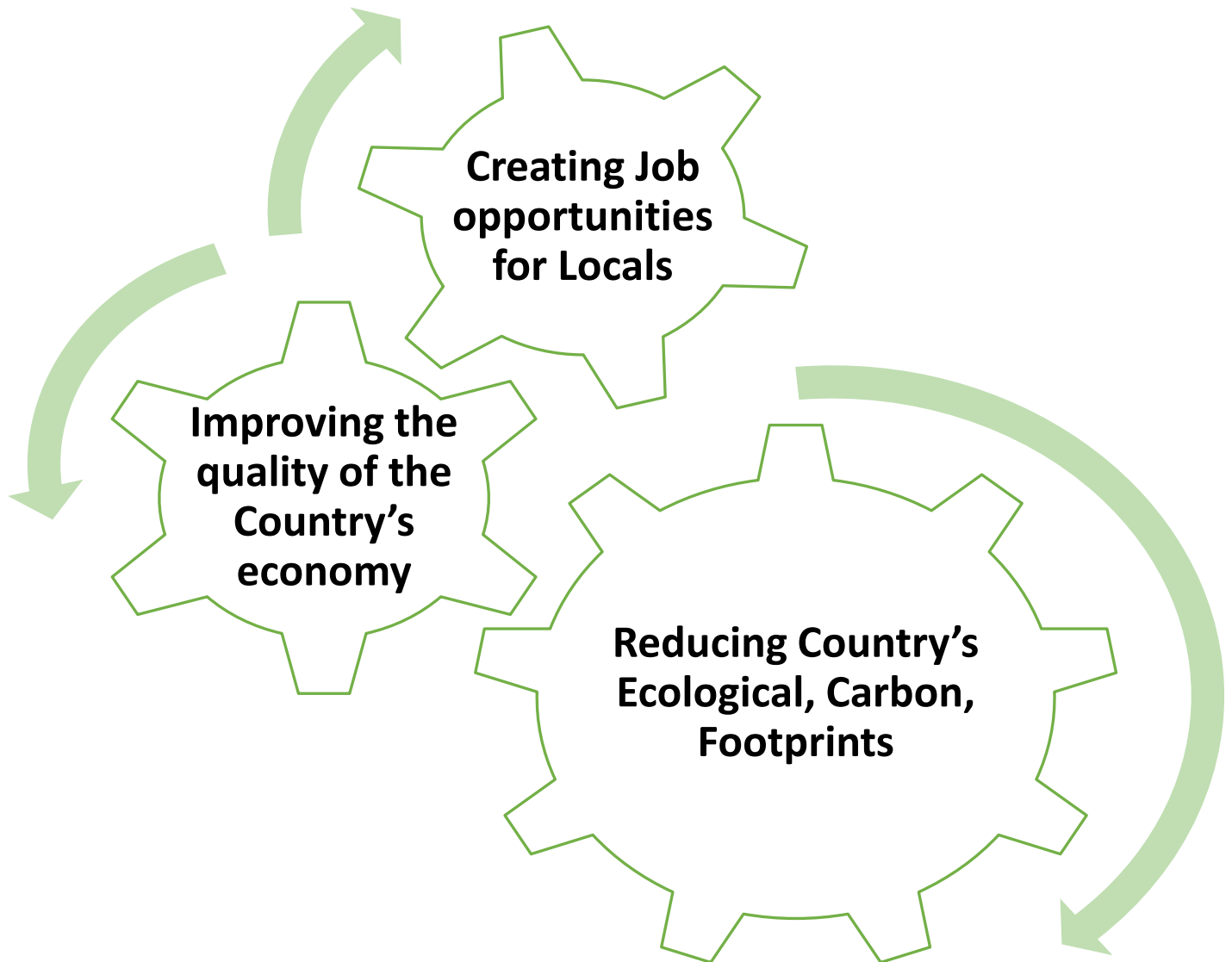
CCE: Carbon Circular Economy

- The circular carbon economy system takes care of dealing with carbon in several ways in order to reduce and eliminate its negative impact on the environment.
- The pillars of the circular carbon economy system are: **4Rs: Reduce, Reuse, Recycle and Remove**



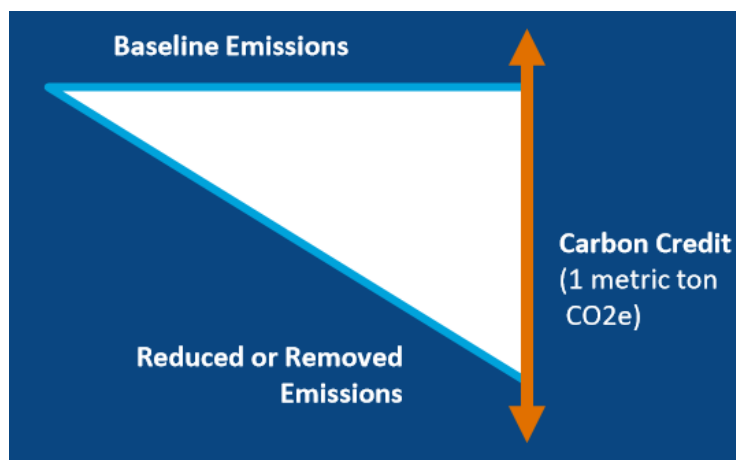


General Indicators of the Success in Future Climate Adaption Projects

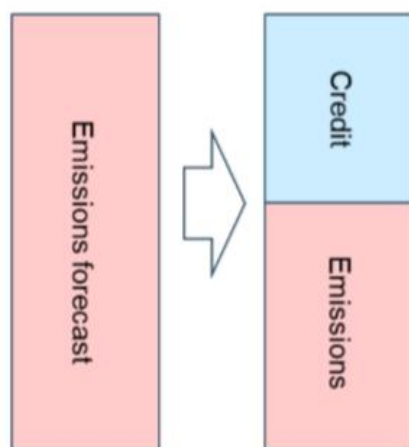




Key Players of the Success in Future Climate Adaption Projects



Baseline & credit concept

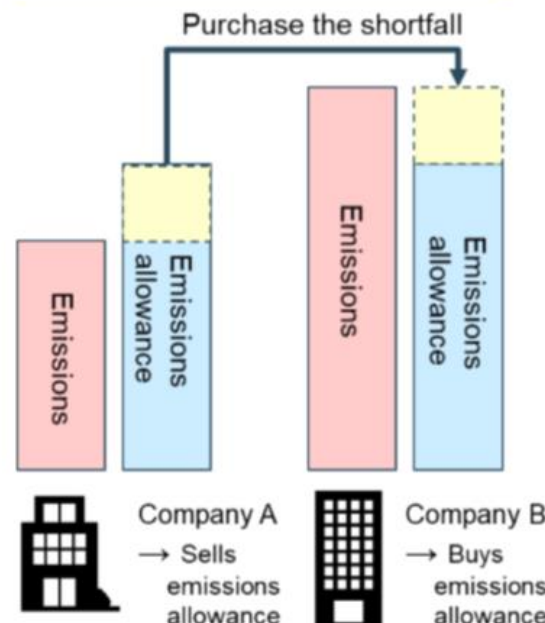


Boiler renewal
Introduction of solar power equipment
Forest management/forestation, etc.

Major differences

Equipment & facilities	What is covered	Organizations & facilities
Additional reductions	Environmental value	Reductions from emissions allowances
Voluntary use, regulatory compliance	Purpose of use	Regulatory compliance
Negotiated transactions	Pricing	Market price

Cap & trade concept



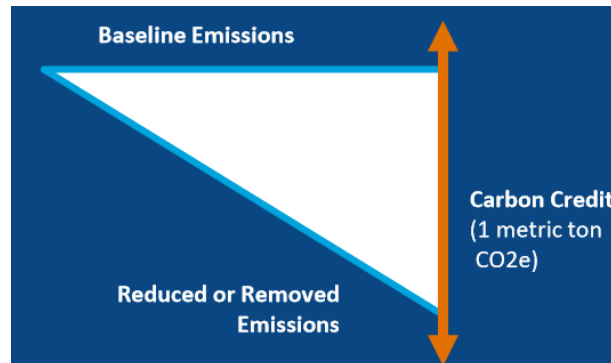
Company A
→ Sells
emissions
allowance



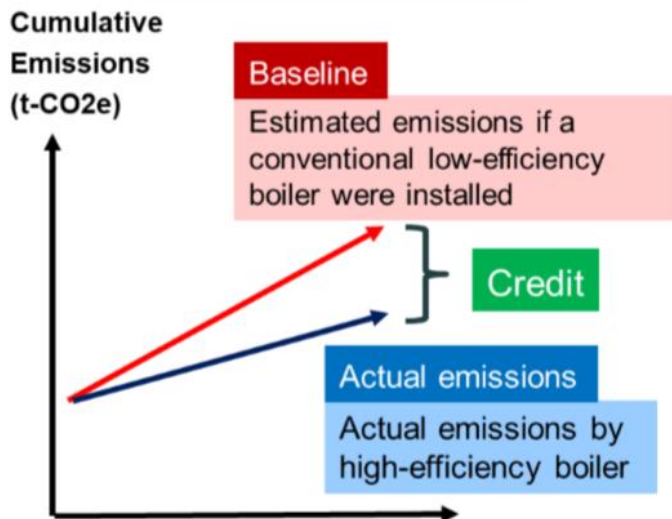
Company B
→ Buys
emissions
allowance



Key Players of the Success in Future Climate Adaption Projects

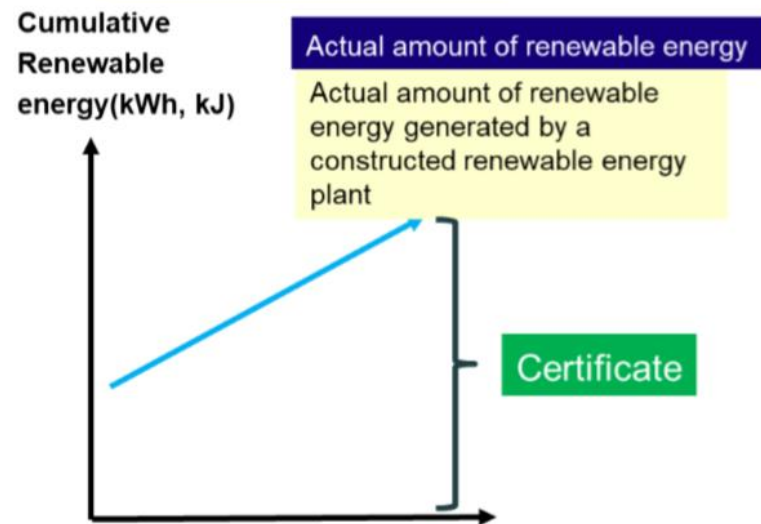


Credit concept



- ✓ **GHG reduction/sequestration amounts** evaluated according to baseline.
- ✓ A company's emissions (t-CO₂e) can be offset by separately procured credits.

Certificate concept



- ✓ Certificates that are issued mainly for electricity and guarantee the **attributes** thereof (e.g., how, when, and where the power was generated).
- ✓ For externally procured electricity, etc. (Scope 2), the attributes can be overwritten via a separately procured certificate.

Differences between carbon credits and certificates



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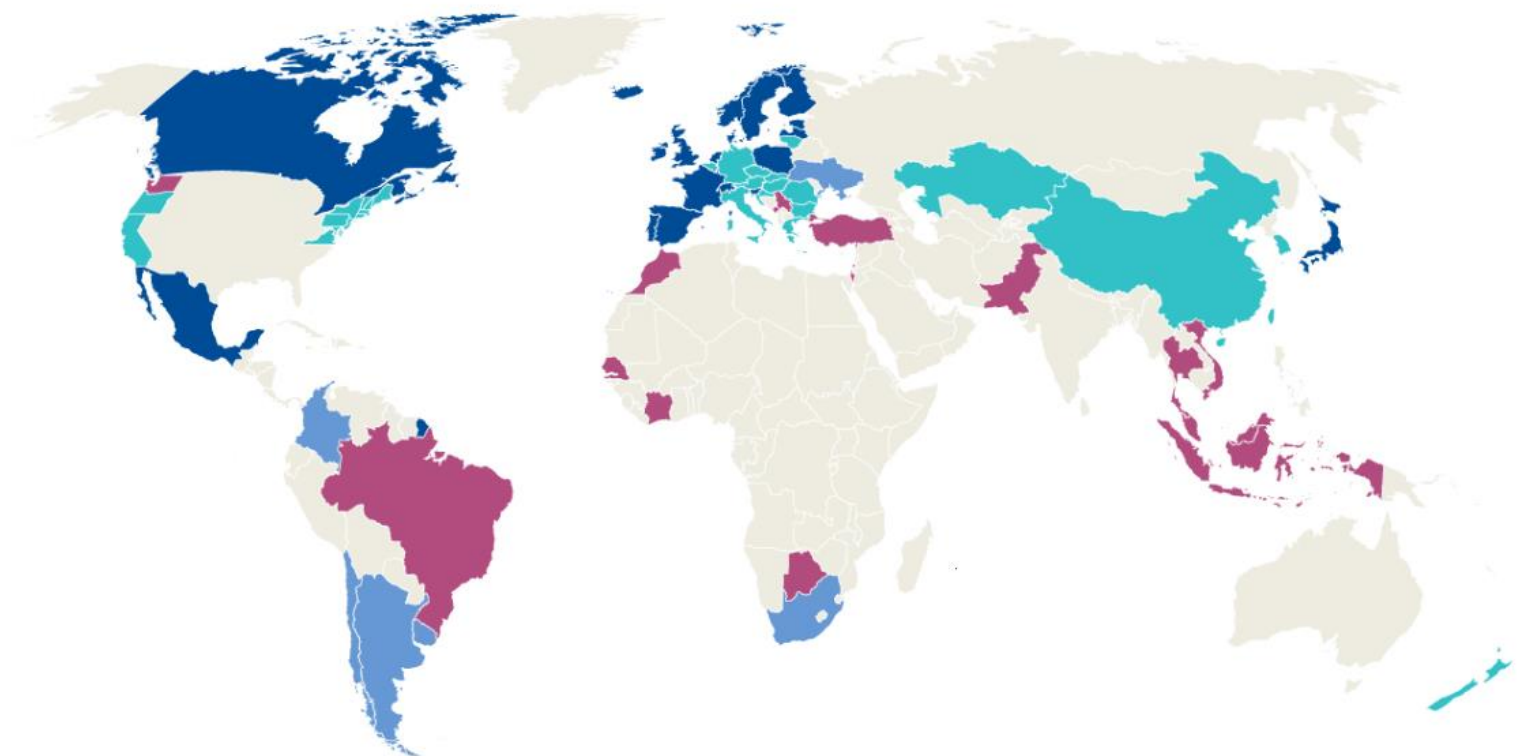
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Under consideration
or planned

Carbon tax

Emissions trading
scheme (ETS)

Carbon tax
and ETS



Source: WBG, IMF staff calculations, and national sources. Note: The boundaries and other information shown on any maps do not imply on the part of the IMF any judgment on the legal status of any territory or any endorsement or acceptance of such boundaries.

United Nations Carbon Offset Platform.