IPAC

The Climate Actions and Policies Measurement Framework (CAPMF)

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IPAC conceptual indicator framework

**Pressure**
- Emissions & drivers
  - Energy use
    - Material use
      - Land use & cover
        - Transport & mobility
          - Agriculture & food systems
          - Other: forestry, construction, ...
  - Emissions trends and trajectories: distance to targets
  - Emission intensities
  - Emission structure

**State**
- Impacts & risks
  - Impacts on climate and environmental conditions:
    - Global climate evidence: temperature, sea level
    - Impacts on environmental conditions: water, biodiversity, ...
  - Climate-related risks and vulnerabilities:
    - Exposure to climate related hazards: temperature, precipitation, drought, wildfires, flooding, ...
    - Distributional impacts: inequality in exposure
    - Climate-related disasters & related losses

**Response**
- Policies, actions, opportunities
  - Mitigation:
    - Policy overview
    - Pricing, taxation
    - Expenditure, financial flows
    - Innovation & technology
    - Regulatory and voluntary approaches
    - Agriculture, forestry, transport, buildings
  - Adaptation:
    - Innovation & technology
    - Expenditure, financial flows
    - Forestry, settlements, agriculture, ...
  - Opportunities for a just transition:
    - Markets, trade, jobs
    - Skills & awareness
    - Distributional impacts of climate policies

Climate action and policies measurement framework
Outline

- Scope, structure and methodology
- Key findings
- Country-specific analysis
Outline

- Scope, structure and methodology
- Key findings
- Country-specific analysis
Objectives and key characteristics

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Characteristics</th>
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<tbody>
<tr>
<td><strong>Measure</strong> governments’ climate action</td>
<td>➢ 128 policy variables</td>
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<tr>
<td><strong>Track</strong> progress</td>
<td>➢ Grouped into 57 ‘policies’</td>
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<td><strong>Identify</strong> level of policy stringency</td>
<td>➢ 52 countries</td>
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<td><strong>Statistical and econometric analyses</strong></td>
<td>➢ 2000 – 2020</td>
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<td></td>
<td>➢ Focus on mitigation</td>
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<tr>
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<td>➢ Coherent with IPCC and UNFCCC</td>
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<tr>
<td></td>
<td>➢ Beyond policy instruments</td>
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<td>➢ All data publicly available</td>
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## Climate Actions and Policies Measurement Framework

### Sectoral policies

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<tr>
<th>Sector</th>
<th>Market-based instruments</th>
<th>Non-market based instruments</th>
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</table>
| Electricity | • Carbon pricing (ETS, carbon and fuel taxes, FFS reform or removal)  
• RES support (FIT, auctions, RPS) | • Bans and phase outs of coal power plants  
• Air pollution standards coal plants  
• Planning for renewables |
| Transport | • Carbon pricing  
• Congestion charge | • Fuel economy standards  
• Energy labels  
• Bans and phase outs of ICE  
• Public rail investment  
• Motorway speed limits |
| Buildings | • Carbon pricing  
• Financing mechanisms for EE (e.g. preferential loans for retrofits) | • MEPS appliances  
• Energy labels appliances  
• Building energy codes  
• Bans and phase outs of fossil-based heating |
| Industry | • Carbon pricing  
• Financing mechanisms for EE | • MEPS industrial motors  
• Energy efficiency mandates |
| Agriculture | • E.g. fertiliser taxes | • E.g. fertiliser and nitrate regulations |
| LULUCF | • E.g. payments for conservation | • E.g. forest as protected area |
| Waste | • E.g. landfill taxes | • E.g. extended producer responsibility schemes |

### Cross-sectoral policies

- **GHG emission targets**
  - Net-zero target (e.g. year, coverage, legal status)
  - NDC target (e.g. coverage of sectors and GHG)

- **Public RD&D expenditure**
  - 6 categories (e.g. energy efficiency, renewables, nuclear, hydrogen, CCS)

- **Fossil fuel production policies**
  - FFS reform for fossil fuel production  
  - Bans and phase outs of fossil fuel extraction  
  - Policies to reduce fugitive methane emissions (e.g. restriction on flaring)

- **Climate governance**
  - Independent climate advisory body

- **Climate finance**
  - E.g. mandatory disclosure of climate risk information for companies

### International policies

- **International co-operation**
  - Participation in key international climate treaties
  - Participation in international climate initiatives (e.g. Climate and Clean Air Coalition)
  - Participation in international emissions pricing from aviation (e.g. CORSIA) or shipping

- **International public finance**
  - Climate-related official development assistance
  - Banning export credits for unabated coal plants
  - Banning public finance of fossil fuels abroad

- **GHG emissions data and reporting**
  - GHG emissions reporting and accounting
  - UNFCCC evaluation of Biennial (Update) Reports
  - Submission of key UNFCCC documents (e.g. National Communications, GHG Inventory)

### Note:
- LULUCF: Land use, land-use change and forestry; ETS: Emissions trading system; FFS: Fossil fuel support; FIT: Feed-in-tariff; RPS: Renewable Portfolio Standard; EE: Energy efficiency; ELV: Emission limit value, ICE: Internal combustion engine; MEPS: Minimum energy performance standard

### Future work program

- **2022**
  - Included in this version
- **2023/2024**
  - Future work program
Data sources

External: internationally recognised and validated datasets

No questionnaires
Methodology: Normalisation and policy stringency

No policy in place

Density of policy variable

Value of policy variable

P₀  P₁₀  P₈₀  P₉₀

0    1    9    10
Most, but not all countries increased policy adoption.
Most but not all countries improved their policy stringency.
Countries with stronger climate action have steeper emissions reductions
Countries’ policy mix changed significantly
The policy mix differs substantially across countries.
The United Kingdom increased its climate action in 2010-2020.
The United Kingdom’s policy mix is well aligned.
The United Kingdom expanded its climate action slightly

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Policy stringency:
- 0
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
Potential next steps

1. Publication of working paper before COP27
2. Continuation and expansion of policy stocktaking and data collection
3. Empirical applications
4. Feed into OECD, IPAC, and UNFCCC work
   a. Dashboard, Country Notes, Climate Action Monitor
   b. OECD Environmental Performance Reviews, Economic Surveys
   c. UNFCCC Global Stocktake
Thank you

Thanks a lot for your attention.

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