Belgium

Geography
- north-western Europe
- 30 528 km²

Population
- 11,2 million inhab. (2015)
- 367 inhab./km² (2015)

GDP
- +2,2% /yr. (2014/2015)

GHG emissions
- 113,9 Mton CO₂-eq. excl. LULUCF (2014)
- 10,2 tonnes CO₂-eq/capita (2014)
GHG emissions profile (2014)

- Energy: 70.0%
- Industry (processes): 17.4%
- Agriculture: 10.4%
- Waste: 1.6%
- Others: 0.6%

Source: National GHG Inventory, June 2016
Trends (1990-2014)

GHG emissions: absolute and relative change 1990 - 2014 (Gg CO₂ eq and in %)

Source: National GHG Inventory, June 2016
Decoupling emissions from growth

Source: World Bank/OECD, Belgian Statistics, National GHG Inventory (June 2016)

1990
- GDP: 265 billion €
- 9.95 million inhabitants
- GHG: 146,021 kt CO₂-eq.

2014
- GDP: 400 billion €
- 11.15 million inhabitants
- GHG: 113,867 kt CO₂-eq.
Belgium’s target within the EU

2020
-20% Greenhouse Gas Emissions (versus 1990)

2030
-40% Greenhouse Gas Emissions (versus 1990)

20% Renewable Energy

20% Energy Efficiency

10% Interconnection

≥27% Renewable Energy

≥27% Energy Efficiency

15% Interconnection

* To be reviewed by 2020, having in mind an EU level of 30%

New governance system + indicators
Belgium’s target within the EU

**EMISSION REDUCTIONS IN ETS AND NON-ETS COMPARED TO 2005**

- **2020**: -10%
- **2030**: -30%

**NON-ETS**

- **BE**: -15%
  (Effort Sharing Decision)

**ETS**

- **2020**: -21%
- **2030**: -43%

- **BE**: -35%
  (subject to final approval under the Effort Sharing Regulation)
Trends and targets (2020)

Historic emissions

Projected emissions (WEM)

2013-2020 budget

-15 %
Trends and targets (2030)

Historic emissions

2013-2020 budget

Projected emissions (WEM)

-15 %

Transport +12%

Buildings -15%

Agriculture -1%

Waste -48%

EC proposal 2021-2030

-35%
Institutional arrangements

BELGIUM

Federal State

3 Regions

3 Communities

• Each has its own
  • Parliament
  • Government
  • Administration
  • Strategies & Policies
  • Legislation

• No hierarchy of norms
• Shared competences in Climate Policy
<table>
<thead>
<tr>
<th></th>
<th>Federal</th>
<th>Regions</th>
<th>Communities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environment</td>
<td>+</td>
<td>++</td>
<td>-</td>
</tr>
<tr>
<td>Energy</td>
<td>++</td>
<td>++</td>
<td>-</td>
</tr>
<tr>
<td>Transport</td>
<td>+</td>
<td>++</td>
<td>-</td>
</tr>
<tr>
<td>Land use planning</td>
<td>-</td>
<td>++</td>
<td>-</td>
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<tr>
<td>Agriculture</td>
<td>-</td>
<td>++</td>
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<tr>
<td>Education</td>
<td>-</td>
<td>-</td>
<td>++</td>
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<tr>
<td>Taxation</td>
<td>++</td>
<td>+</td>
<td>-</td>
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<tr>
<td>Research</td>
<td>++</td>
<td>++</td>
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<td>Foreign Affairs</td>
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</table>
Organization of climate policy

• Strategies, plans, policies & measures:
  - Prepared, adopted and implemented by regional and federal authorities
  - Coordination through cooperation agreements

• National Climate Commission (since 2002) :
  - National Climate Plan
    (preparation, approval, evaluation and update)
  - Common methodologies
    (impact assessments, projections)
  - Reporting obligations
    (Inventories, Nat. Coms & BRs, EU Monitoring Mechanism), Exchange of information, etc,)
Recent Developments

- National burden sharing 2013-2020
- National climate and energy plan 2030
Recent developments:
National burden sharing 2013-2020

- political agreement (December 2015)
- enforced by a (legally binding) cooperation agreement (October 2016)
- incl. provisions regarding Monitoring, Reporting & “compliance” (annual)

<table>
<thead>
<tr>
<th>2020 target</th>
<th>BEL</th>
<th>Flemish Region</th>
<th>Walloon Region</th>
<th>Brussels Capital Region</th>
<th>Federal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-ETS (vs 2005)</td>
<td>-15%</td>
<td>-15,7%</td>
<td>-14,7%</td>
<td>-8,8%</td>
<td>PAMs (15250+7000 kton CO2-eq)</td>
</tr>
<tr>
<td>RES Total Transport</td>
<td>13% 4224 Mtoe 10%</td>
<td>2,156 Mtoe PAMs</td>
<td>1,277 Mtoe PAMs</td>
<td>0,073 Mtoe PAMs</td>
<td>0,718 Mtoe 10%</td>
</tr>
<tr>
<td>Auctioning revenues Actual Through 2020</td>
<td>1st 326 M€ Further</td>
<td>53% 52,76%</td>
<td>30% 30,65%</td>
<td>7% 7,54%</td>
<td>10% 9,05%</td>
</tr>
<tr>
<td>International climate finance</td>
<td>50 M€/year</td>
<td>14,5 M€</td>
<td>8,25 M€</td>
<td>2,25 M€</td>
<td>25 M€</td>
</tr>
</tbody>
</table>
National Burden Sharing 2013-2020

- PAM FED add (7000 kt)

Flemish Region (-15.7%)
Walloon Region (-14.7%)
Brussels Region (-8.8%)

Renewable Energy (Mtoe)
- Federal 0.718
- Flemish Region 2.156
- Walloon Region 1.277

International finance (M€/yr)
- Federal 25
- Flemish Region 14.5
- Walloon Region 8.25
- Brussels Region 2.25

ETS auctioning revenues share
**Examples of key policies and measures**

<table>
<thead>
<tr>
<th>Category</th>
<th>Measures</th>
</tr>
</thead>
</table>
| Renewable energy | • Off-shore wind energy  
                        • Different supports schemes for wind, solar, biomass energy production  
                        • Biofuel incorporation in transport fuels |
| Buildings      | • Different support schemes for energy savings in existing buildings  
                        • EU Directive on Energy Performance of Buildings (new-built) |
| Transport      | • Distance-based road charging system for heavy goods vehicles  
                        • Investments in public transport & cycling infrastructure  
                        • Free public transport for commuters |
| Others         | • Industry: sectoral agreements  
                        • Agriculture: manure management policy (pig farming) |
Other developments

Federal
- Programme ‘Low Carbon Belgium by 2050’ (involvement of stakeholders)
- Federal MRV law (October 2016)

Flemish Region
- Progress report “Flemish Climate Policy Plan 2013-2020”. State of play of the climate mitigation and adaptation
- Climate and energy summit process incl.: sectoral commitments of all regional Ministers and stakeholders to mitigation towards 2020 and 2030 / Development of 2050 vision

Walloon Region
- Walloon Air, Climate and Energy plan (PACE) (implementation Climate Decree, -30% in 2020, -80 to -95% in 2050)
- Stakeholder consultations (new PAMs to achieve the 2030 Energy union objectives and improve the governance)

Brussels Capital Region
- Brussels Air, Climate and Energy Code - COBRACE
- Air, Climate and Energy Plan (PACE)
Recent developments:

**National Energy and Climate Plan**

- Key element of EU Energy Union governance
- High-level strategic planning document, including overarching strategy covering five dimensions:
  - Energy security, solidarity and trust
  - Integrated energy market
  - Energy efficiency
  - Decarbonising the economy
  - Research, innovation and competiveness
- 2021-2030, with a perspective to 2050
THANK YOU
MRV arrangements for PAMs

- PAMS monitored and impact evaluated by each authority

- Results are exchanged and compiled (National Climate Commission)

- Methodologies vary depending of the type of policies, the sector, the target, the availability of data, etc. (harmonized to the extent possible)

- Evaluation of emission reductions not possible for all types of measures (estimate the global impact of clusters of measures)
<table>
<thead>
<tr>
<th>International</th>
<th>EU</th>
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<tbody>
<tr>
<td></td>
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</tr>
<tr>
<td>Emission reduction</td>
<td>-20% (EU)</td>
</tr>
<tr>
<td>Other target</td>
<td>Conditional target of – 30%</td>
</tr>
<tr>
<td>Sectors</td>
<td>Energy, IPPU, agriculture, waste, LULUCF</td>
</tr>
<tr>
<td>Gases</td>
<td>CO₂, CH₄, N₂O, HFCs, PFCs, SF₆, NF₃</td>
</tr>
<tr>
<td>Base year</td>
<td>CO₂, CH₄, N₂O: 1990 HFCs, PFCs, SF₆: 1995</td>
</tr>
<tr>
<td>Use of MBM</td>
<td>Subject to quantitative and qualitative limits</td>
</tr>
<tr>
<td>Carry-over</td>
<td>Subject to KP rules</td>
</tr>
<tr>
<td>GWP</td>
<td>IPCC 4th AR</td>
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</tbody>
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