

Summary of the main impacts and their severity expected in Belgium (adapted from regional impact assessments studies). The top of the table gives an idea of the uncertainties by using different projections: according to the projections, the change in temperature will be more or less quick and extensive.

| Wet Projections | 2030 | 2050 | 2085 | | | | | |
|--|--|------|------|------|-----|------|-----|---|
| Mean Projections | 2030 | 2050 | | 2085 | | | | |
| Dry Projections | 2030 | | | 2050 | | 2085 | | |
| Temperature rising (°C) | 0,5 | 1 | 1,5 | 2 | 2,5 | 3 | 3,5 | 4 |
| Agriculture | ↗ of erosion risk due to heavy rain | | | | | | | |
| | ↗ of loss of soils due to heavy rain | | | | | | | |
| | Variability of the crop production and breeding (↗ of the frequency of extreme events) | | | | | | | |
| | ↗ of the pressure of diseases, parasites, weeds and invasion episodes | | | | | | | |
| Coastal Areas | ↗ of water needs and water stress risk | | | | | | | |
| | ↗ of yields or production of certain crops Limitating factors (photoperiod, water, fertility) and reversal of the trend? | | | | | | | |
| | ↗ risks of breaking of natural (mostly sand and dunes) coastal defences | | | | | | | |
| | ↗ risks of breaking of man made (dykes, wave breakers, ...) coastal defences | | | | | | | |
| Fisheries | ↗ of risks of higher stormfloods and waves | | | | | | | |
| | damages caused by changes of the wind regime and golf height | | | | | | | |
| | reduction of sweet water upper layer of the ground water in the polders (salt intrusion) affecting natural systems and infrastructures | | | | | | | |
| | changes in the abundance and distribution of marine species, inclusive commercial fish stocks | | | | | | | |
| Spatial Planning / Infrastructures | new commercial species wil appear (shift from South to North) | | | | | | | |
| | new harmful species will appear | | | | | | | |
| | ↗ vulnerability of highly specialised fishery sector | | | | | | | |
| | ↗ of flood risk | | | | | | | |
| | Risk of disruption of transport by waterways (low-flows more important) | | | | | | | |
| | Impact of heatwaves and amplification by heat islands | | | | | | | |
| damage to infrastructure due to high temperatures (rail deformation, etc.) | | | | | | | | |
| Risk of disruption of road and rail transport and damage to infrastructure due to snow and frost | | | | | | | | |
| Impacts on clay soils (shrinkage) | | | | | | | | |
| Karst Risk | | | | | | | | |
| Damage related to a possible increasing of the frequency of storms | | | | | | | | |

| | |
|--------------------------------|---|
| Forest | Modification of the distribution areas of forest species (bad for wood production) |
| | Amplification of invasions |
| | ↗ of damage related to fires, storms, droughts |
| | damage related to frost |
| | ↗ of the pullulations frequency |
| Biodiversity | ↗ of the growing and then limitation by sol fertility and droughts |
| | Phenology modifications |
| | Added pressure on vulnerable areas (peat areas ...) |
| | changes in distribution areas |
| | Amplification of invasions |
| Energy | Phenology modifications |
| | ↗ of energy consumption for cooling (cold chain/ air conditioning in summer) |
| | Integrity and capacity of installations (production and transport) |
| | Problem of cooling of nuclear plants 1 |
| | Management of the network and consumption of electricity 2 |
| Health | ↘ of the energy consumption related to warming |
| | Seasonal modifications of the productions (solar, wind, hydraulic) and of the productivity of biomass |
| | ↗ of the death due to heatwaves and diseases related to food contamination |
| | ↗ of respiratory diseases and allergies (pollens..) |
| | ↘ of death in winter |
| Water Resources and Management | Sanitary risks due to air quality (summer) |
| | sanitary risks due to air quality (winter) |
| | ↗ of diseases related to water contamination |
| | ↗ of vector diseases |
| | Pollution of ground water by leaching |
| Tourism | Degradation of water quality (floods, streaming, low-flows) |
| | variation in water courses flow can lead to pollution |
| | increased rainfall in winter recharges grondwater |
| | Lowering of ground water in summer |
| | Longer periods of favorable conditions for offseason tourism |
| Industry & services | Favorable conditions for summer tourism but risks for nautical activities during dryer summers |
| | Energy consumption for warming |
| | Energy consumption for cooling |
| Legend | Impact on production processes (e.g. water shortages, cooling of plant, etc.), direct (flooding, high winds, etc.) and indirect (supply problems) damages |
| | More frequent and/or intensive weather disasters will challenge insurance systems |
| | <div style="display: flex; align-items: center;"> <div style="width: 20px; height: 20px; background-color: red; margin-right: 5px;"></div> very bad </div> <div style="display: flex; align-items: center; margin-top: 5px;"> <div style="width: 20px; height: 20px; background-color: orange; margin-right: 5px;"></div> bad </div> <div style="display: flex; align-items: center; margin-top: 5px;"> <div style="width: 20px; height: 20px; background-color: yellow; margin-right: 5px;"></div> not very bad </div> <div style="display: flex; align-items: center; margin-top: 5px;"> <div style="width: 20px; height: 20px; background-color: green; margin-right: 5px;"></div> opportunities </div> <div style="margin-left: 20px; margin-top: 10px;"> <div style="width: 20px; height: 20px; background-color: grey; display: inline-block; margin-right: 5px;"></div> impact difficult to appreciate </div> |
| | <p>1. The modification of the parc (complete closure of Tihange site expected in 2025) should decrease significantly the pressure on water. Attention: Belgium is also directly concerned by the existing risk in the interconnected parcs.</p> <p>2. The modification of the parc will create a modification of the modes of electricity management (costs very important)</p> |