

COUNTRY AND EXPERTS CASES ON STAKEHOLDER CONSULTATIONS - BELGIUM

4th International LTES Forum

Bonn • 9/12/2022

KOEN MEEUS

koen.meeus@health.fgov.be

Climate Change Service
Federal Public Service Health,
Food chain safety and Environment



TOWARDS A
LOW CARBON SOCIETY



TOWARDS A LOW CARBON SOCIETY

Project by the federal climate change administration (4 governments responsible for climate policy)

→ **To contribute to the development of Belgium's Long-Term Strategy**

- Paris Agreement and EU Governance Regulation requirement

→ To encourage reflections and initiatives in order to **promote exchanges between as many actors as possible**

SCENARIOS FOR A LOW CARBON BELGIUM BY 2050 (2013)



- Developed by team of consultants led by Climact
- Several pathways towards GHG reductions in Belgium of 80-95% by 2050, wrt 1990
- 150+ people (academics, research centres, administrations at various levels of government, stakeholders & sectoral organisations selected for their expertise on transport, buildings, agriculture, industry, energy, ...) collaborated during expert workshops (May-Dec 2012)
- Full report, Summary for Policymakers + sectoral analyses (transport, buildings, 10 industrial sectors, agriculture and energy) + online 2050 Calculator

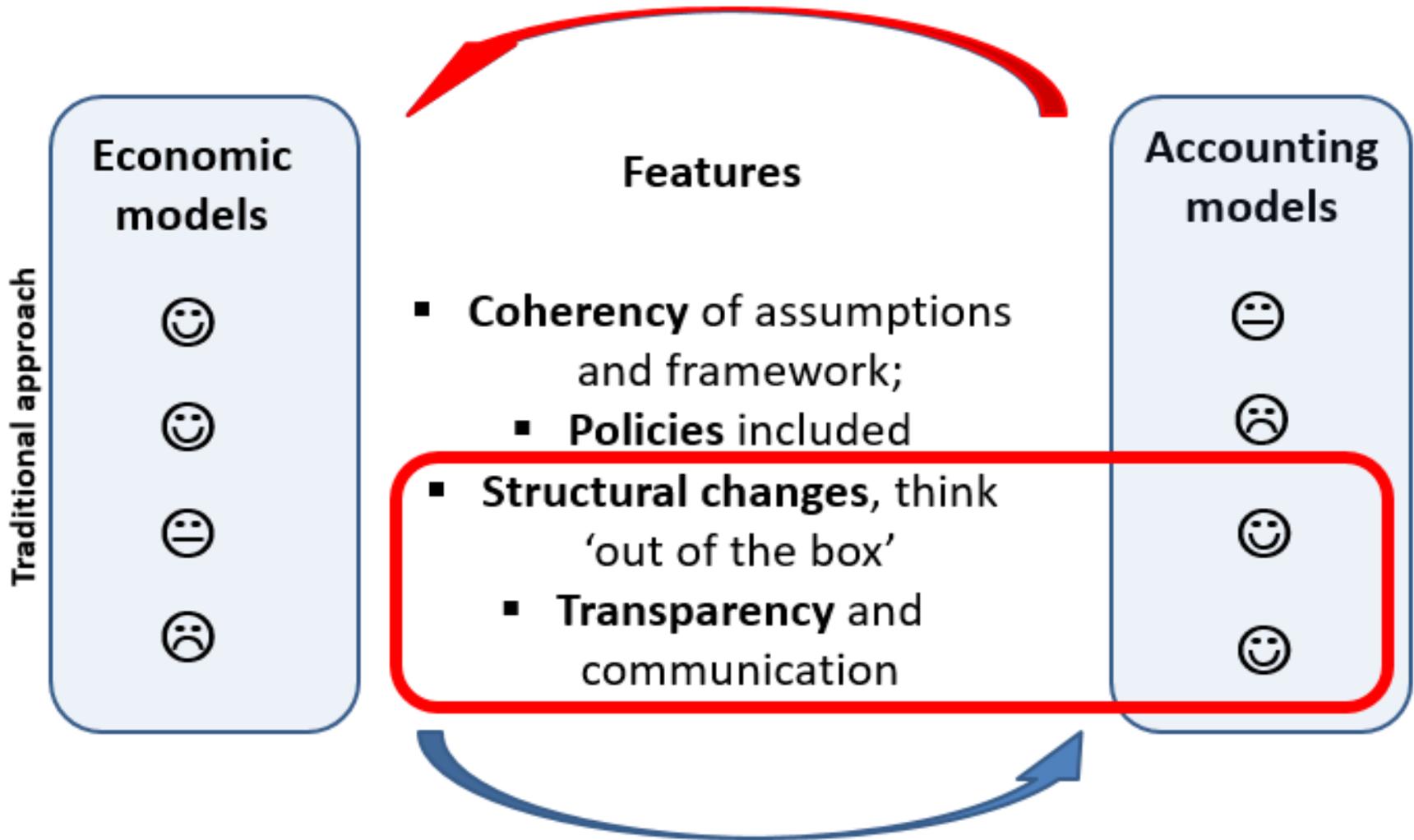
SCENARIOS DEVELOPED WITH 2050 CALCULATOR

=> Accounting model, as a complement to economic computable models traditionally used by governments

*“It is a story of **transformation, disruption and radical change** – stable structures are not what it is about. [...] we live in an **imperfect, inefficient** and constantly changing world where there are multiple frictions, unemployment and other dynamics, and **multiple unpriced benefits from climate policies** [...]. Thus, the **models often fail to capture these key features** when simulating the GDP impact of climate policy on output.”*

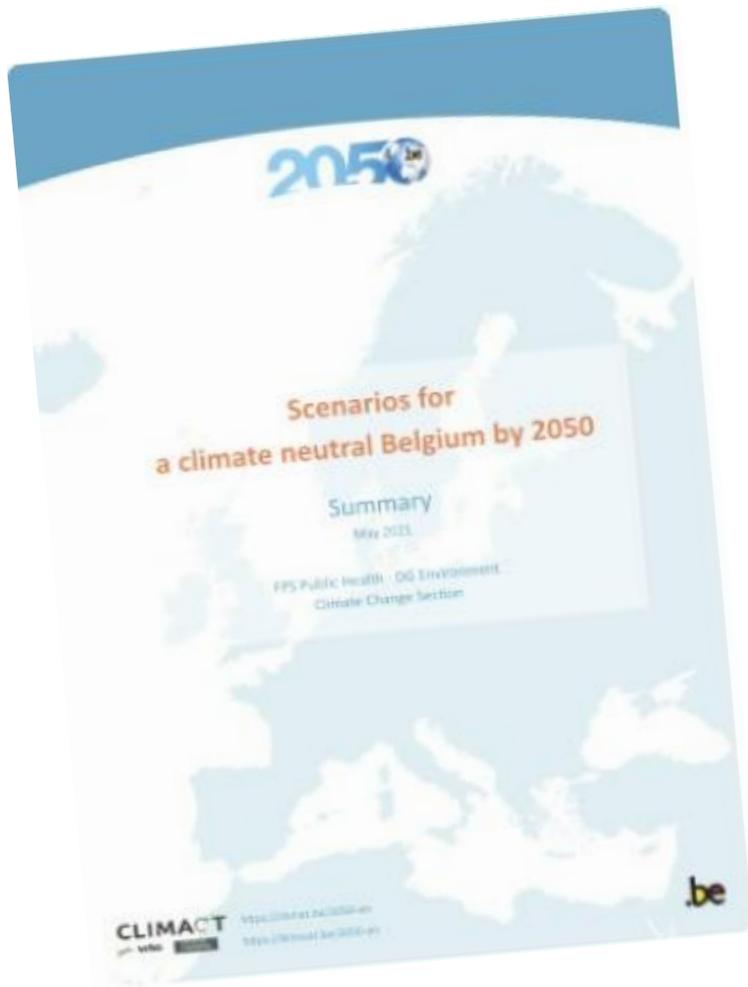
N. Stern – New Climate Economy (2015)

COMPLEMENTARY APPROACHES



UPDATED CALCULATOR + NEW SCENARIOS (2021)

6



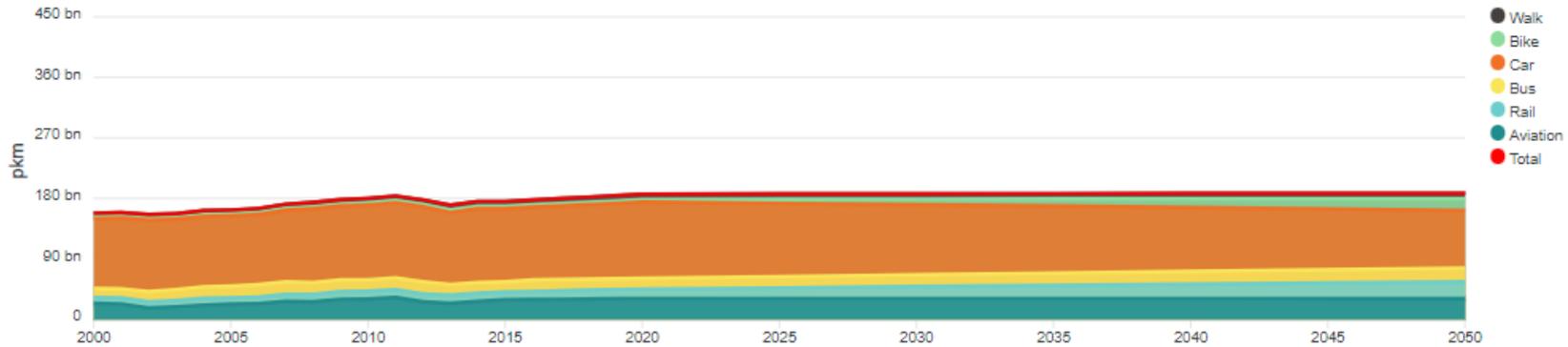
- Similar methodology as in 2013
- New scenarios aiming at climate neutrality in Belgium by 2050
- Taking into account latest available technologies
- New elements: materials, land use, ...
- Stakeholder consultations at ad-hoc basis, for instance regarding hydrogen plans of major actors
- Report + Summary + 2050 Pathways Explorer (calculator) available online

c. Activity: Passenger demand

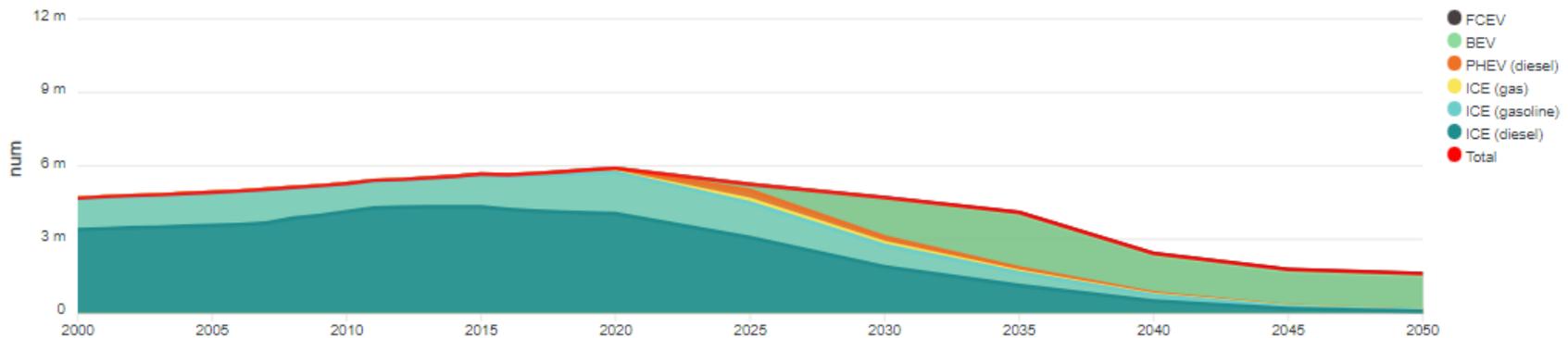
Belgium

> KPIs

Passenger transport demand by mode



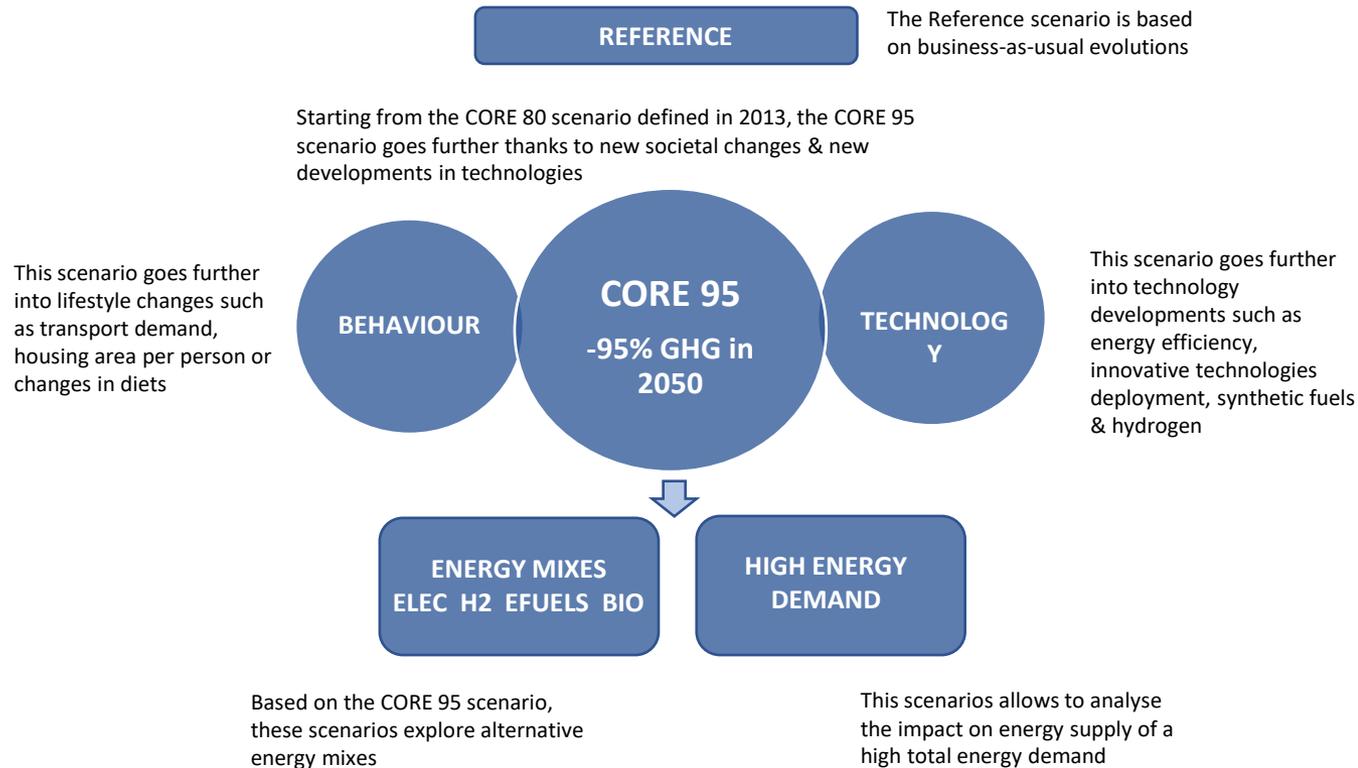
Car fleet by technology



Acronyms used in the legend: ICE (Internal combustion engine), PHEV (Plug-in hybrid vehicle), BEV (Battery electric vehicle), and FCEV (Fuel cell electric vehicle)

> Agriculture, forestry...

A SET OF 3 MAIN SCENARIOS REACHING 95% GHG BY 2050, ACCOMPANIED WITH 5 COMPLEMENTARY SCENARIOS



OUTREACH WITH SCENARIOS AND PATHWAYS EXPLORER

- For **debates with government, parliament**, ... to concretise the transition, its challenges and opportunities
- To inspire reflections on **long-term strategies**
- Show vision and long-term goals when **designing short- and middle-term policy plans**, in order to align short-term action and avoid lock-ins
 - scenarios used to set the scene during the recent process of **Climate Roundtables** with stakeholders to update federal energy and climate plan for 2030
- Scenarios used as a **skeleton/basis for various analyses**, for instance in the context of the National Debate on Carbon Pricing, but also in broader transition context, beyond pure climate/energy policy, on air pollution, role of batteries, jobs and skills, ...
- Scenarios were used in **study on macro-economic impact of the transition** (2016)
 - Innovative approach wherein traditional economic models were “fed” with scenarios developed with the 2050 Calculator

Methodology

Central scenarios description: Hermes GLOBAL & Reference scenarios up to 2030

Parameters	Hermes Reference scenario	Hermes GLOBAL scenario
CO ₂ emissions 2030 & mitigation measures	<ul style="list-style-type: none">-16% (2030 vs 1990)No additional mitigation measures included	<ul style="list-style-type: none">-46% (2030 vs 1990)Mitigation measures (in line with technical assumptions defined in CORE scenario)
Carbon price	<ul style="list-style-type: none">Carbon price in EU ETS sector only (gradually from 5€ today to 35€ in 2030)	<ul style="list-style-type: none">Carbon price in all sectors (gradually to 40€ in 2030)
Accompanying fiscal policy	<ul style="list-style-type: none">None	<ul style="list-style-type: none">Recycling of the carbon revenues through reduction in personal and social contributions
International context	<ul style="list-style-type: none">Business-as-Usual in all region	<ul style="list-style-type: none">Low carbon transition policies in EU and the rest of the world
GDP average growth rate	<ul style="list-style-type: none">1.4%/year	<ul style="list-style-type: none">Endogenous

OUTREACH EXAMPLE: MY2050



Focus :

- General public, but active outreach to students in secondary schools (15-18 years old)
- Multidisciplinary (geography, (human) science, languages,...)

Objective :

- Understanding of the **urgency** of climate action
- Debate about **behavioural and technological** changes
- Develop **your own pathway, but different opportunities & costs**
- Encourage a **reflection about these pathways.**

CLIMACT



cronos
Public Services



Characteristics of the webtool

- ✓ User friendly & visual engaging :
 - Interactive landscape
 - Short animations (7), infosheets (13), pop-up text
 - Immediate calculation of your choice (Emission reduction, costs, energy consumption)
 - Results & comparaisson of your scenario
 - Manual for Teachers (homepage)

- ✓ Transparency about hypothesis, but no analysis of macro-economic and social impacts

- ✓ Suitable for laptops and desktop. Mobile phones maybe in the future

- ✓ Update : ongoing (technically, ambitions and levers)



My 2050

Create your own scenario for a low carbon society by 2050

THE CHALLENGE



HOW ?



GO AHEAD !



MANUAL FOR
TEACHERS



 Tweet

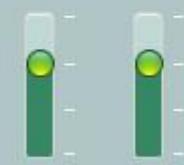


1990

-80%
-85%
-95%



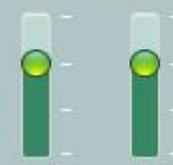
Behaviour
Technology



▶ TRANSPORT



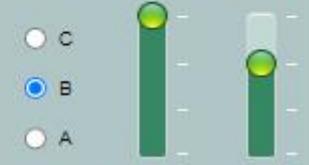
Behaviour
Technology



▶ BUILDINGS



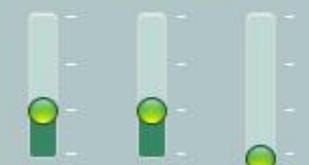
Production
Carbon intensity
Carbon capture



▶ INDUSTRY



Wind & solar
Geothermal & hydro
Import of electricity



▶ ENERGY SUPPLY



Bio-mass
Behaviour
Technology



▶ AGRICULTURE

⚡ No net electricity imports ⚡

Go to your results





TRANSPORT – Mobility Behaviour

This lever is currently set at
AMBITION LEVEL: 3

This lever allows you to reduce the energy consumption of passenger transport by selecting the ambition level of behavioural choices in 3 areas:

① The demand for transport per person

Reducing the number of kilometres travelled per person (by teleworking, etc.) is one way to reduce the emissions. The higher the chosen level of ambition, the greater the decline in the demand for transport per person will be in 2050.

 [Demand for transport per person in 2050](#)

② The occupancy rates for modes of transport

The occupancy rate for modes of transport has an impact on the emissions via the number of vehicles needed to meet the transport demand. The higher the chosen level of ambition, the more car, bus and train occupancy rates will increase in 2050.

 [Occupancy rates for modes of transport in 2050](#)

③ A shift towards more environmentally friendly modes of passenger transport ('modal shift')

Another way to reduce emissions is to make an informed choice for modes of transport that pollute less, such as **public transport** (tram, train, bus) and **'soft' modes of transport** (on foot or by bike). This lever determines the share of the various modes of passenger transport in 2050.

 [Share of modes of transport in 2050](#)

[Opportunities and challenges](#)



© 123RF/Lightpost

-  This lever has no impact on the demand of goods transport. In this tool this demand is linked to the industrial activities (lever 'Industry - Production').
-  International journeys by plane and ship are not included in this tool: within the international climate negotiations it has been determined that these emissions are not attributed to any particular country.



OUTREACH TO STUDENTS

- **Collaboration agreement with GoodPlanet (since 2017)**
 - Select, training & management of climate coaches
 - Promotion of the offer in secondary schools (4-7th Year)
- **Give animation sessions :**
 - introduction about climate change
 - reflection about the transition with My2050 webtool

⇒ Objective : 350 sessions/year
- **Additional tasks and activities:**
 - coordination meetings to exchange experiences
 - other promotional activities (incl. press)



- Estimation of number of students that received a climate coach workshop

Between the start of the project till now (+/- 5 years)		
Februari 2017 – June 2018	7.440 students	372 workshops
September 2018 – June 2019	5.660 students	283 workshops
September 2019 – June 2020	3.800 students	190 workshops
September 2020 – June 2021	2.480 students	124 workshops
September 2021 – now (planned)	1.760 students	88 workshops
TOTAL	21.140 students	1.057 workshops



TOWARDS A
LOW CARBON SOCIETY

www.climatechange.be/2050

koen.meeus@health.fgov.be

