



# A Sustainability Charge on Meat

October 2021, Geert Bergsma,  
head of the LCA Department CE Delft



# CE Delft

- Independent research and consultancy since 1978
- Transport, energy, resources and food systems
- Know-how on economics, technology and policy issues
- 75 employees, based in Delft, the Netherlands
- Not-for-profit



## Clients



Industries  
(Small and medium size enterprises, transport, energy and trade associations)



Governments  
(European Commission, European Parliament, regional and local governments)



NGOs

# Is a meat tax that is good for the environment, consumers and farmers possible?

- Study by CE Delft + CLM + UVA
- Commissioned by TAPP Coalition
- Based on earlier environmental research on proteins (LCA)
- Based on earlier research on Meat taxation
- Case study for the Netherlands (17 mln inhabitants)

New:

- What if the revenues from a meat taxed are used to compensate consumers and farmers?
- Can poorer consumers be fully compensated?
- Can a substantial sustainability subsidy for farmers be generated?
- What CO<sub>2</sub> reduction is possible?



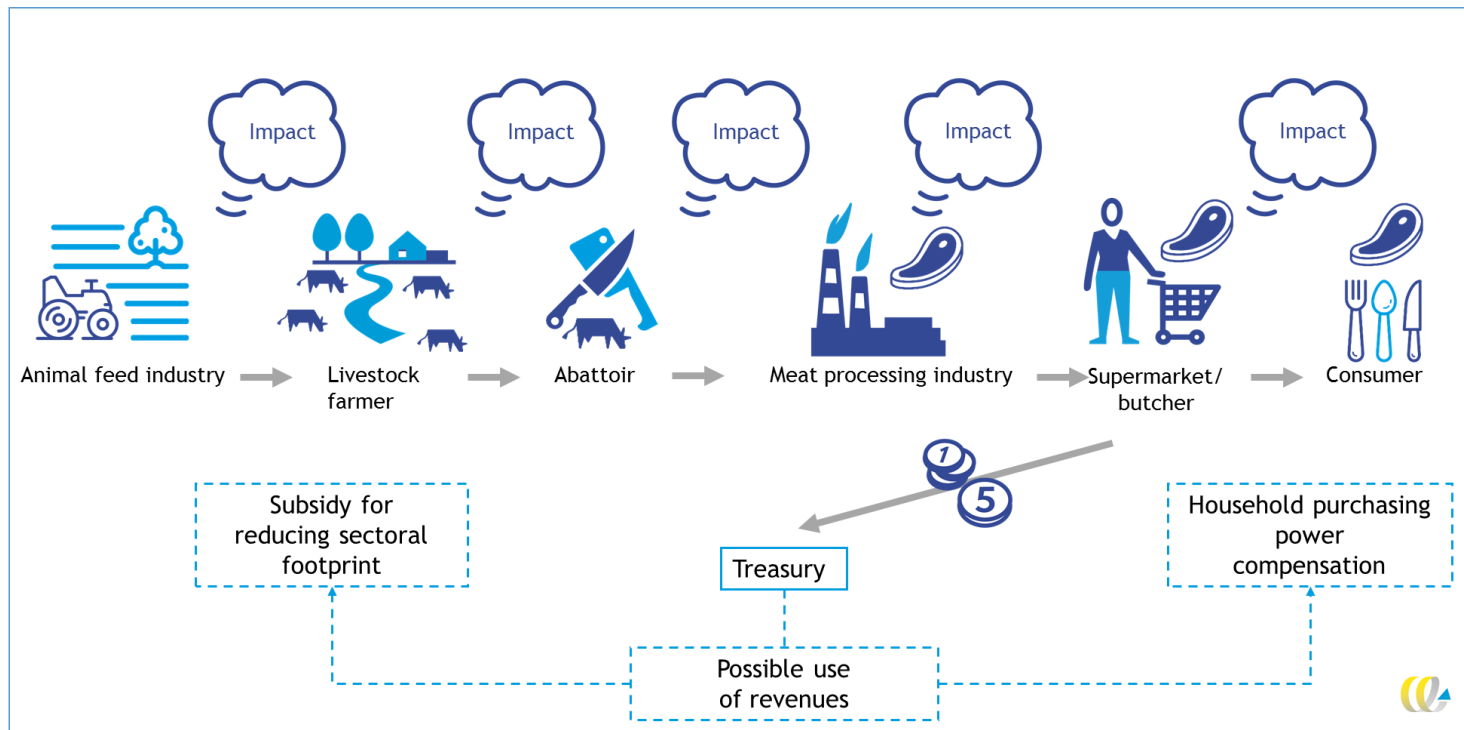
# Why a Meat Sustainability Charge?

CE Delft (2018):

- Meat production has social costs:
  - Environmental impacts
  - Climate change
  - Land use
- These social costs are not reflected in the consumer price
- In this study the tax equals the social costs not reflected in the prices

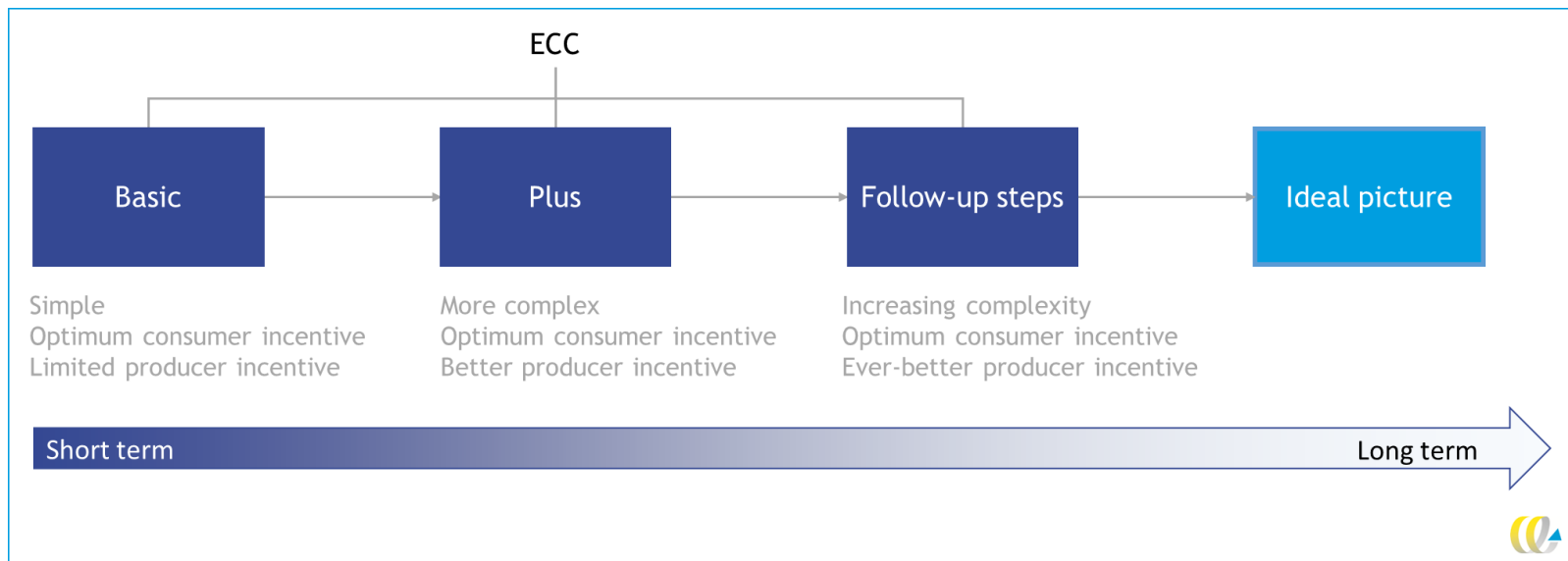
# Systems of meat tax with compensations

- Tax is based on external cost and collected like the VAT
- Tax is used for compensation of consumers and farmers



# Design Meat Sustainability Charge

- Short term: Basic system
- Long term perspective / ideal: External Costs Charge



# Sustainability charge rates per kg of meat

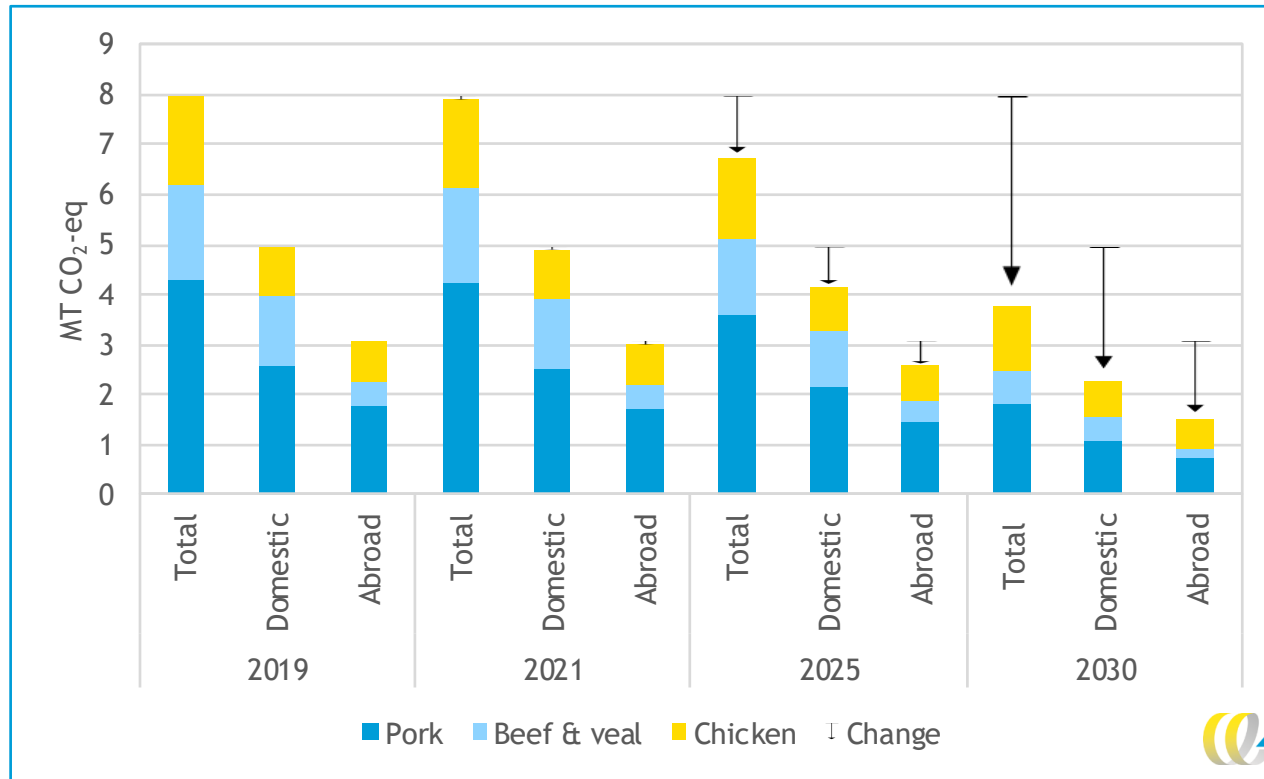
	2021	2025	2030
Beef/veal	€ 0.52	€ 2.69	€ 5.70
Pork	€ 0.41	€ 2.13	€ 4.50
Chicken	€ 0.18	€ 0.95	€ 2.04

*Sustainability charge (€/kg), European average*

- Average European rate
- Methodology from CE Delft (2018)
  - Based on external costs for GHG-emissions, environmental pollution, land-use/biodiversity and livestock diseases
  - Excluded: animal welfare, health impacts of meat eating

# CO<sub>2</sub> emission reductions (NL or EU tax)

- NL: In 2030 total 4.2 Mton less CO<sub>2</sub> emissions (-53%) (2% of the Dutch GHG emissions)



- EU: Up to 120 Mton CO<sub>2</sub> reduction possible.



# Welfare effects on European Scale (EU tax)

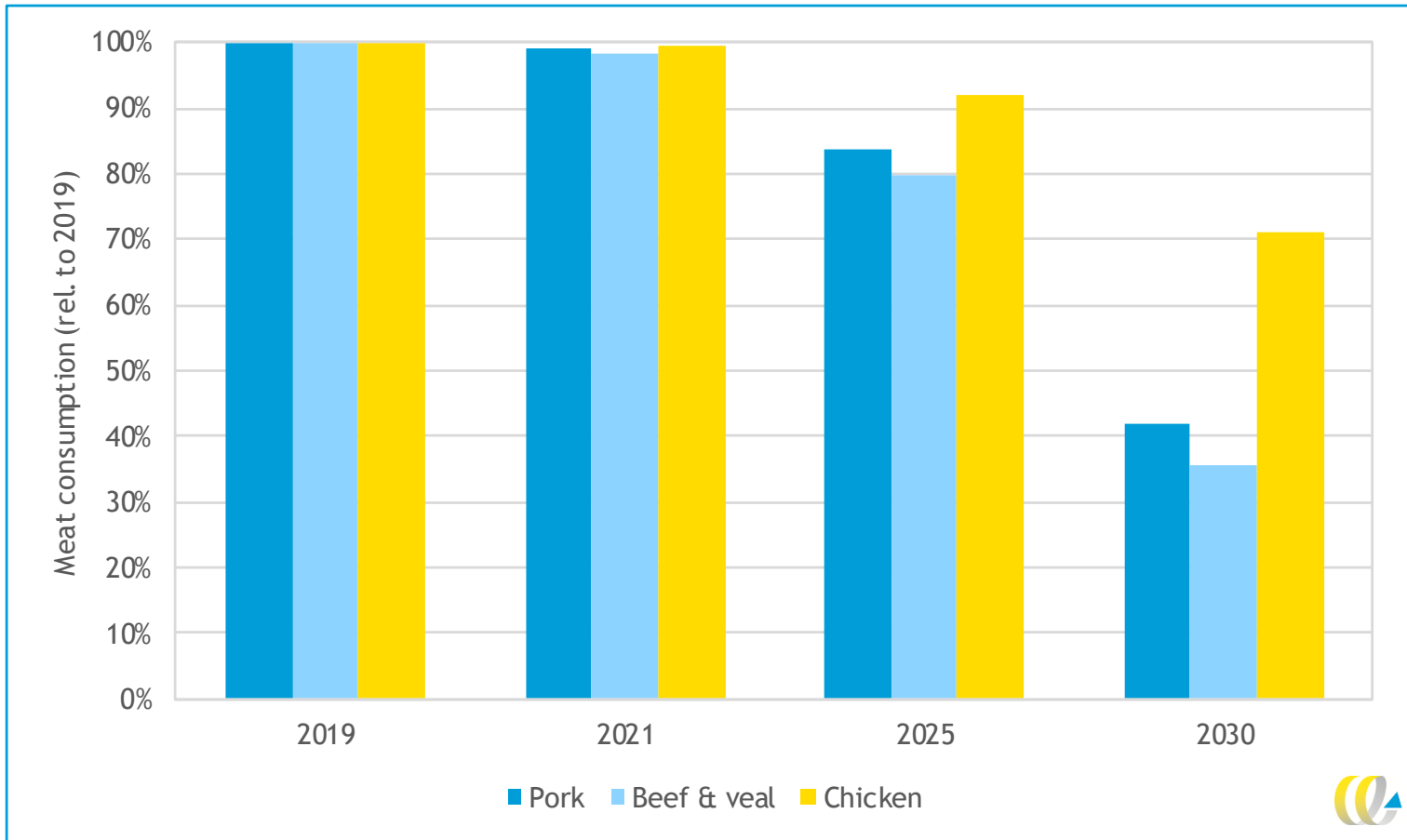
	2021	2025	2030
Welfare impacts (€ bln), of which:	0.3	2.5	8.8
Climate	0.2	1.9	7.9
Environment	0.4	2.8	8.9
Consumer and producer surplus	-0.3	-2.5	-8.8
Government revenues (€ bln)	6.1	27.3	32.2

*Based on a sustainability charge (€/kg) of € 1,73 (chicken); €3,61 (pork); €4,77 (beef) in 2030.*

Net 9.8 billion euro welfare effects possible in the EU



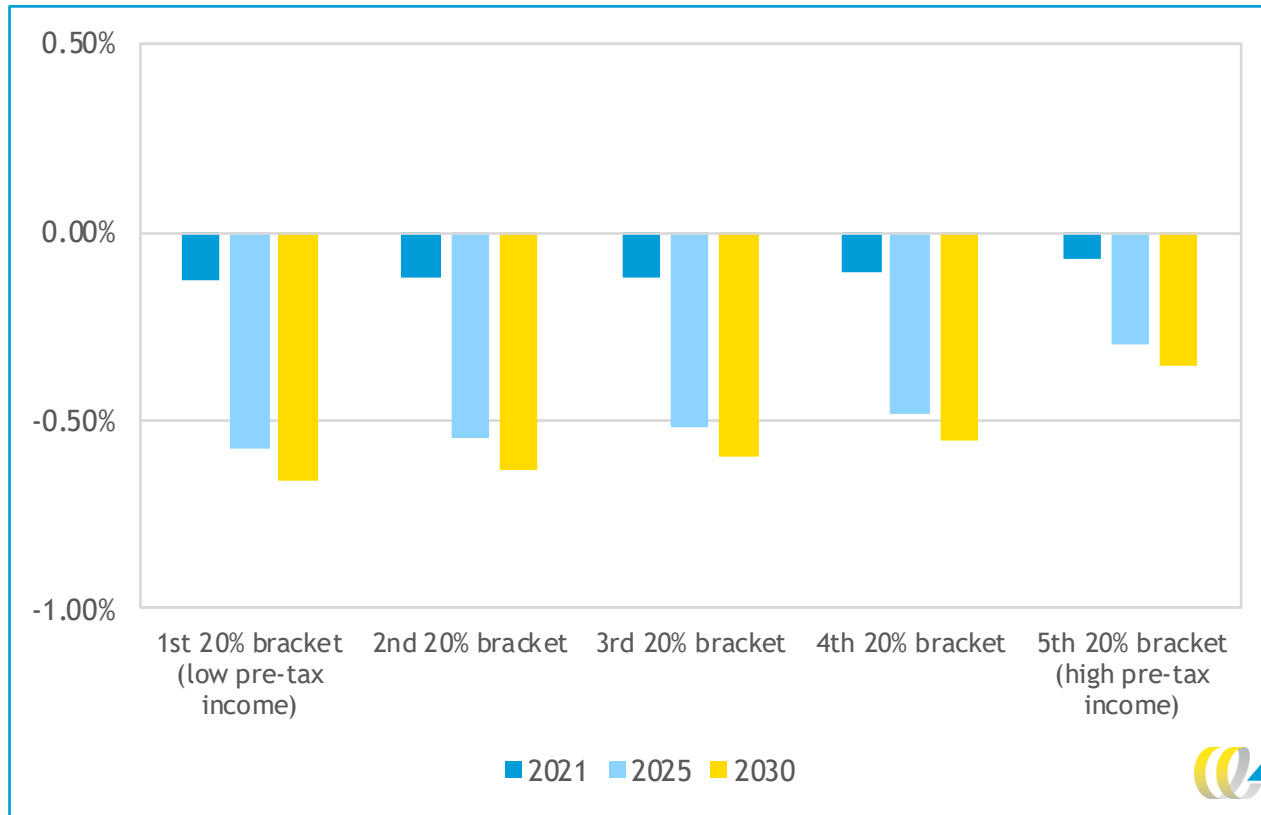
# Meat consumption (NL, tax starts in 2021)



# Tax amount and effect on incomes (no comp.)

Dutch tax: 2021: 265 Mln euro 2025: 1,176 mln euro 2030: 1,356 mln

Income effects:



# Recycling of revenues

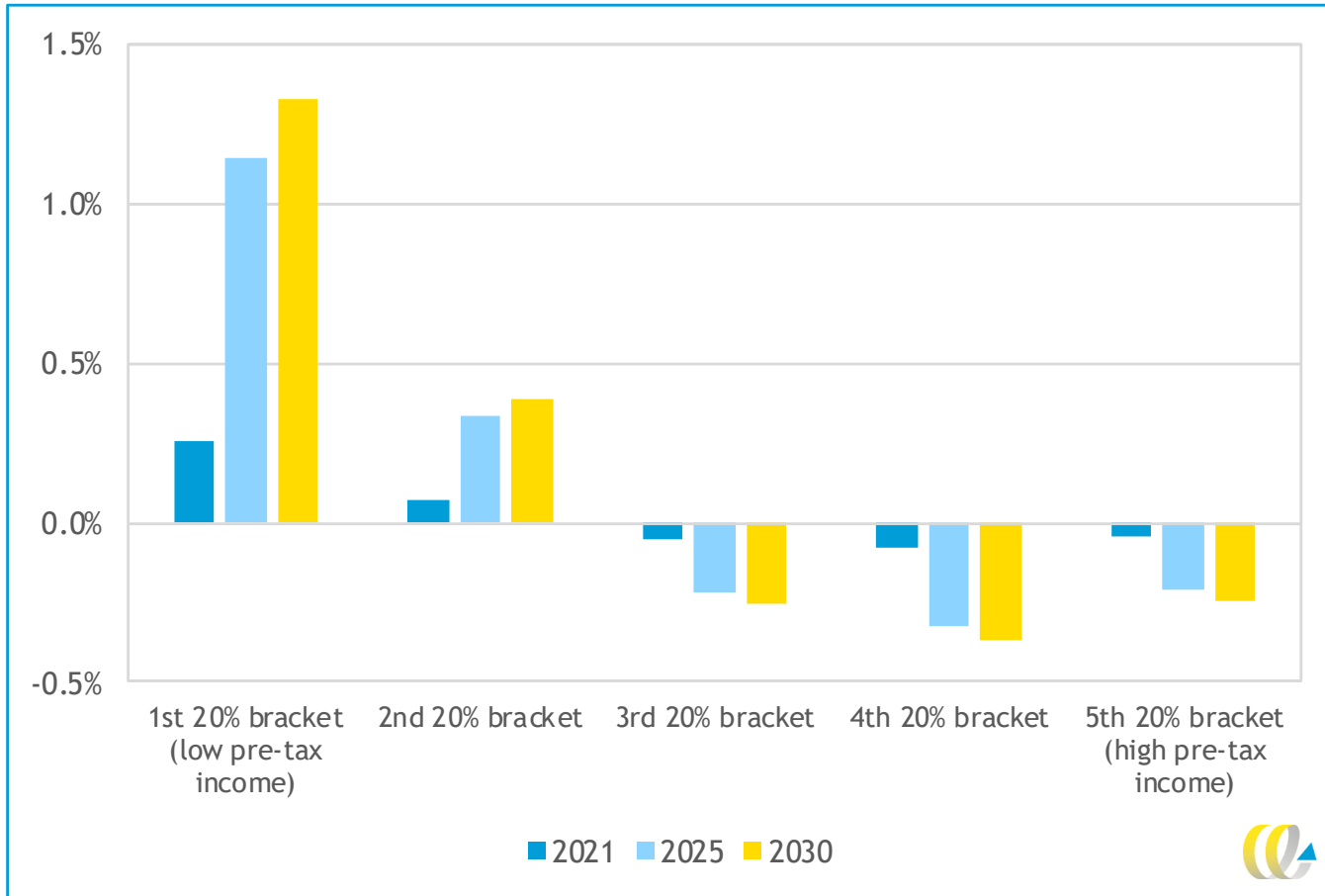
- 20% compensation of the sector 80% consumers.

Revenue use	Sum (€ mln)
Climate measures, sector	135
Financial incentives for herd reduction, sector	150
Purchasing power compensation, households	1,071
Total	1,356

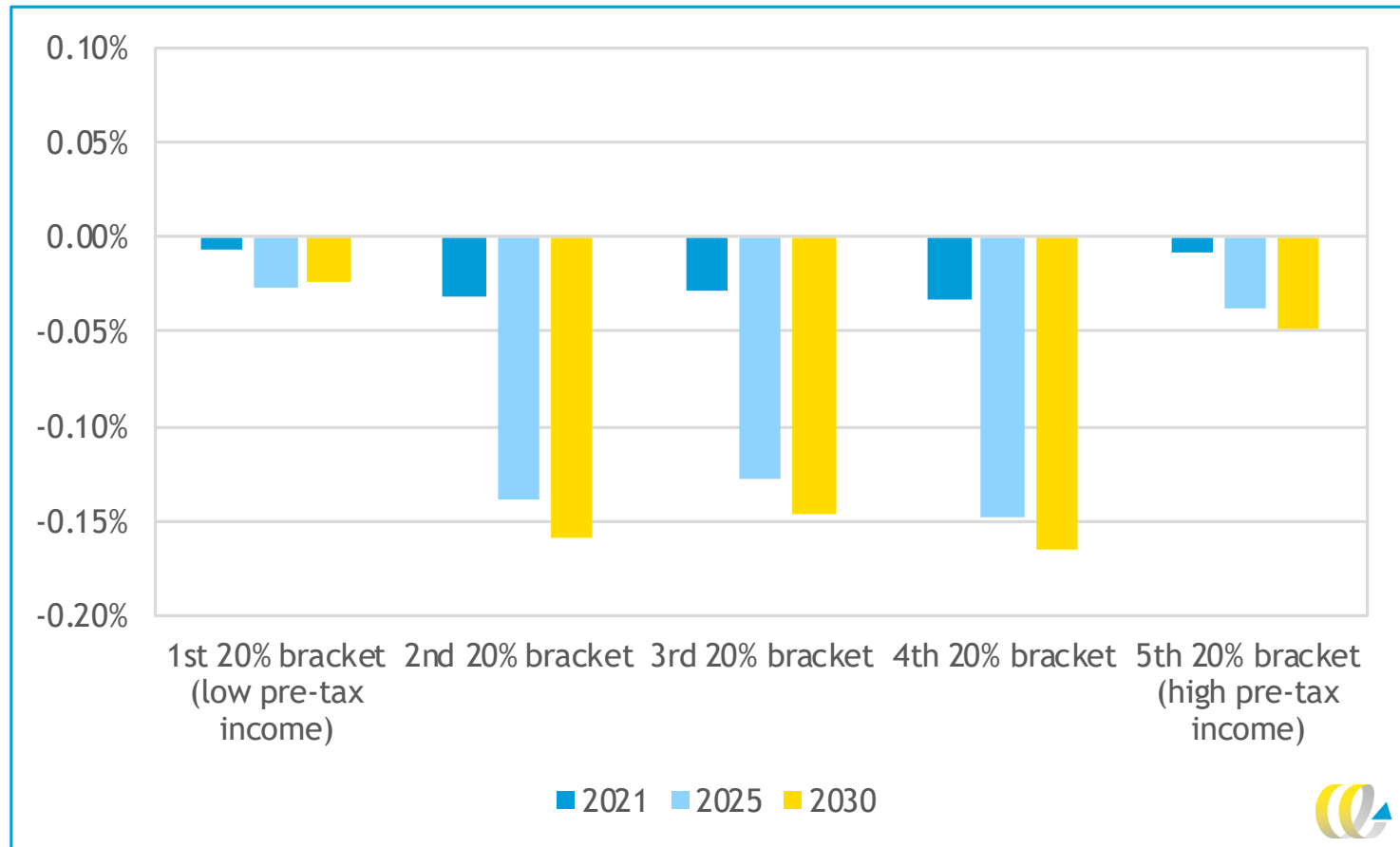
## Revenue recycling options:

- Increasing the health care allowance (=subsidy lower incomes)
- Lowering the 9% VAT rate (for food products)
- Lowering the 9% VAT rate on fruit and vegetables

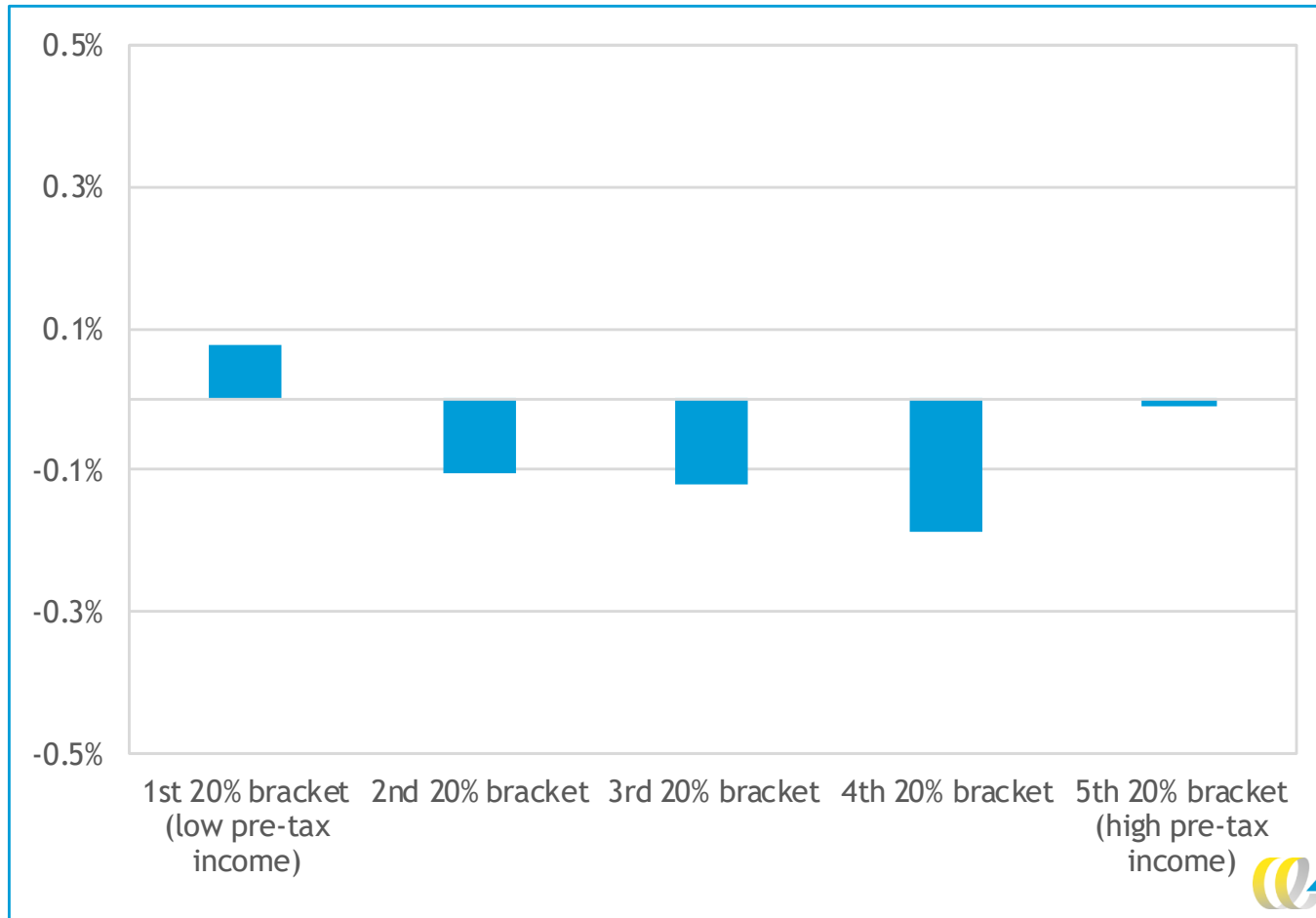
# Income effects: Tax + Increasing the health care allowance



# Income effects: Tax + Lowering the 9% VAT rate



# Income effect 2030: tax + mix of compensation option



# Conclusions

- Meat sustainability charge
  - Polluter pays
  - Lower meat consumption
  - Benefits for environment and climate (2% reduction in NL)
  - Net positive for the economy
- Recycling of revenues
  - Revenues can help make the farming sector more sustainable
  - Loss of purchasing power can be compensated for lower incomes





## More info

- The English report:  
[cedelft.eu/publications/a-sustainability-charge-on-meat/](https://cedelft.eu/publications/a-sustainability-charge-on-meat/)
- With much more details on:
  - Organizational and legal aspects of the variants of the tax
  - Differences between basic and ideal variant
  - Administrative costs
  - The way farmers could be compensated with subsidies for sustainable innovations
  - The measures farmers can get subsidy for.
  - Number of companies who pay the tax (8,420 - 47,750)
  - Details on income effects

