



'End the Cage Age' Impact Assessment CAPRI model results

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The CAPRI model

The Common Agricultural Policy Regional Impact model

- developed with European Commission research funds
- global static partial equilibrium agro-economic tool
- impacts of agricultural, trade and environmental policies
- regional level

Examples for use

- ☞ CAP legislative proposal impact assessments
- ☞ FTA impact assessments
- ☞ F2F and BDS evaluations
- ☞ environmental baselines for the EU Mid-term Agricultural Outlooks, etc.

CAPRI model scenarios

- only Scenario A, B1 and C1 results are presented here
- all calculations are based on a *5% nominal social discount factor* as recommended by the European Commission (Methodologies for analysing impacts in impact assessments, evaluations, and fitness checks (2021), Chapter 8 in: Better Regulation Toolbox)
- **Scenario A – immediate transition**, full EU policy impact: all farmers are forced to transition by (1 January) 2025
- **Scenario B1 – transition by 2035**, full EU policy impact: farmers refrain from any further advancement in transitioning before the transition deadline
- **Scenario C1 – transition by 2045**, full EU policy impact: farmers refrain from any further advancement in transitioning before the transition deadline

Modelling the transition

1. *Physical performance*

- differences between livestock housing systems grasped through technological parameters, based on the **literature reviews**, **expert consultations**, **farm-level surveys**, and **other databases**

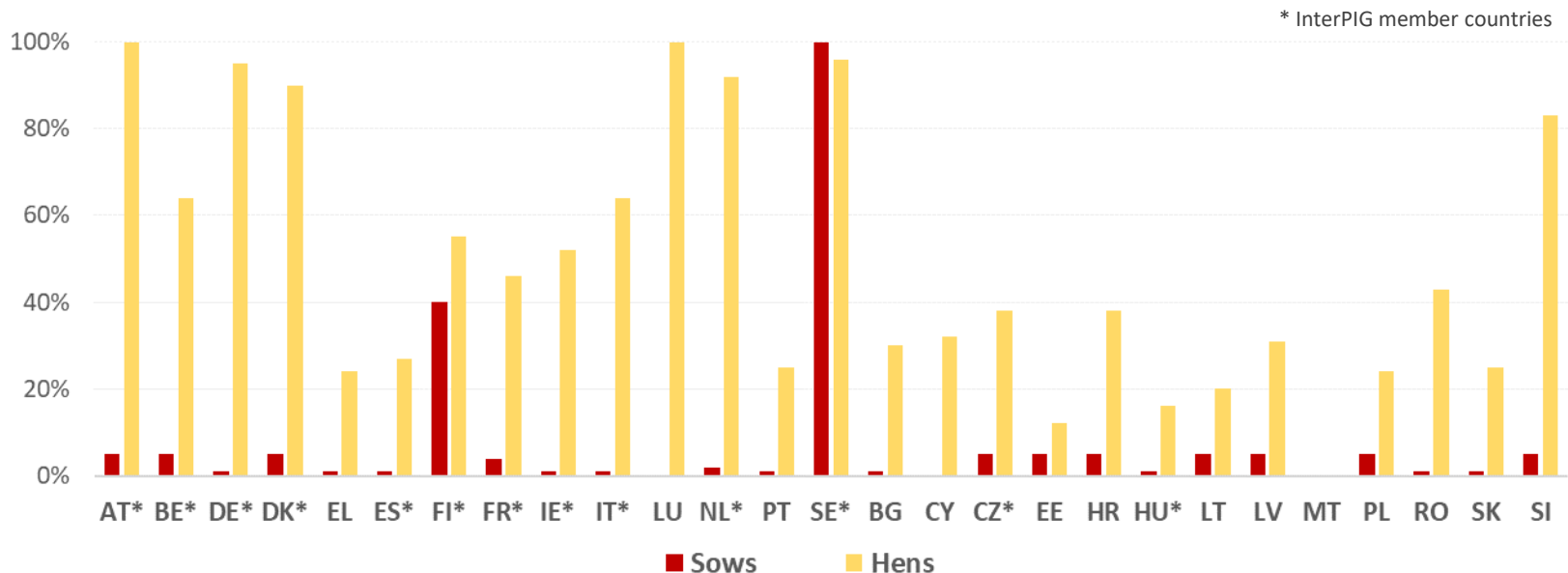
2. *Compliance cost estimations*

- transition to cage-free livestock housing systems assumes additional costs, i.e.
 - cost of investment in new buildings and equipment
 - costs related to decreasing physical efficiency
 - costs related to increasing labour intensity

3. *Market premium for cage-free products*

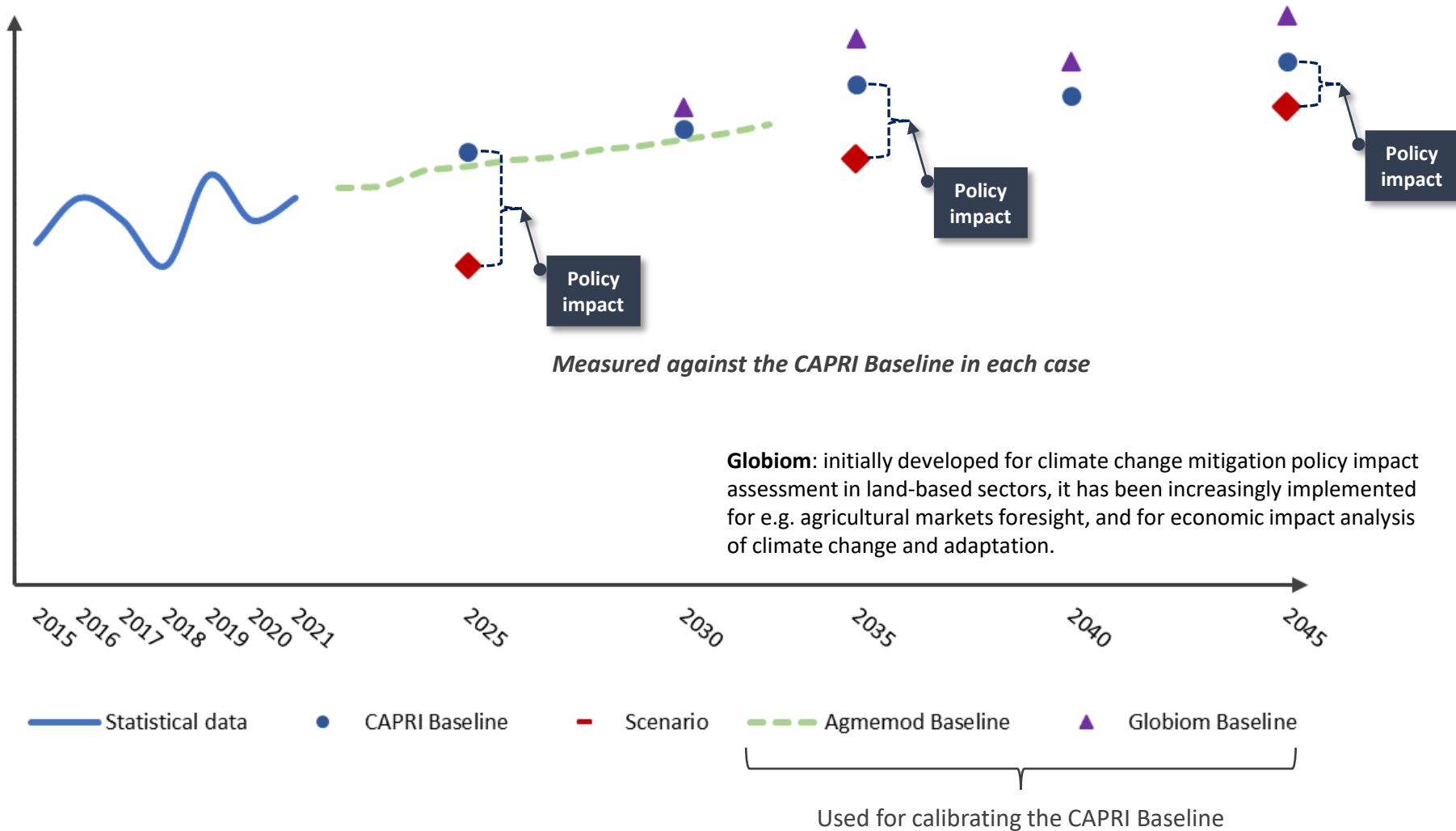
- no premia as a whole sector transitions to cage-free housing systems

4. *Transition assumptions for Scenarios A, B1 and C1*



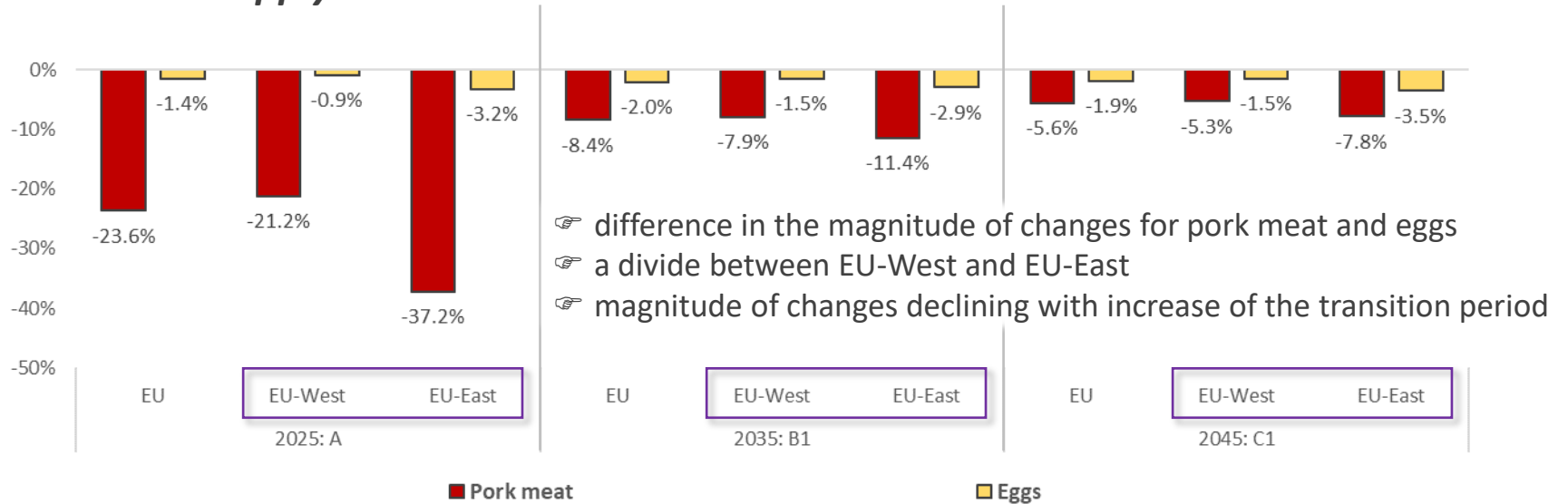
Understanding the CAPRI Baseline and the assessed impacts

Illustration only

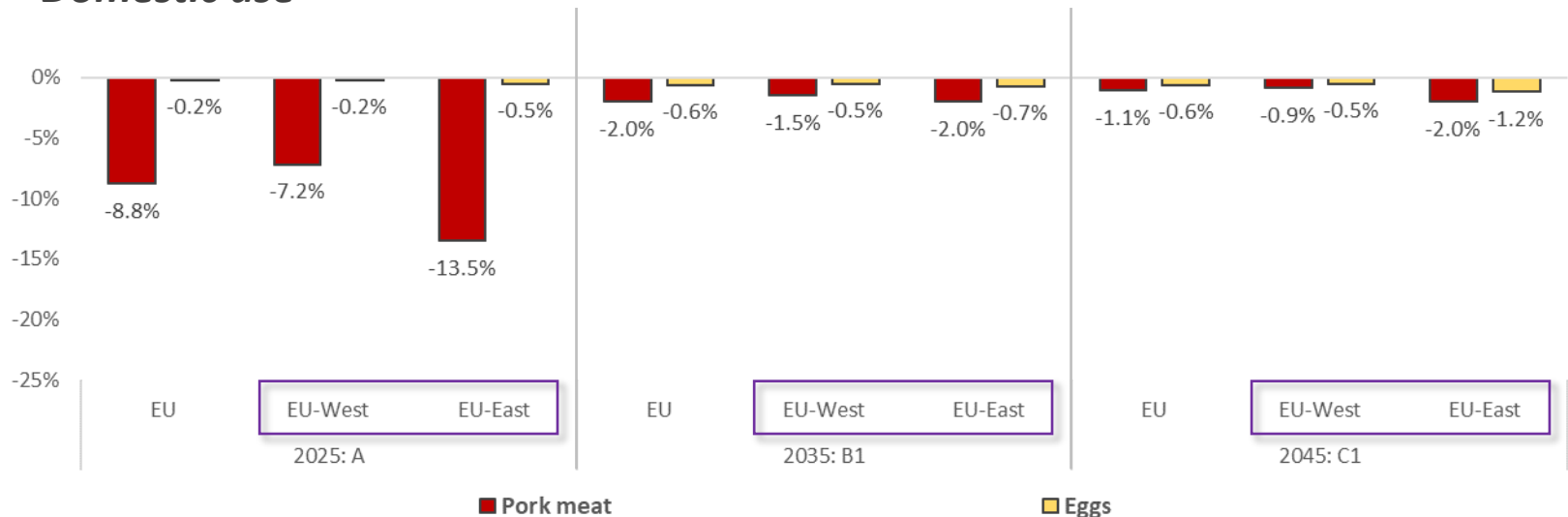


Estimated changes in domestic supply and use

Domestic supply

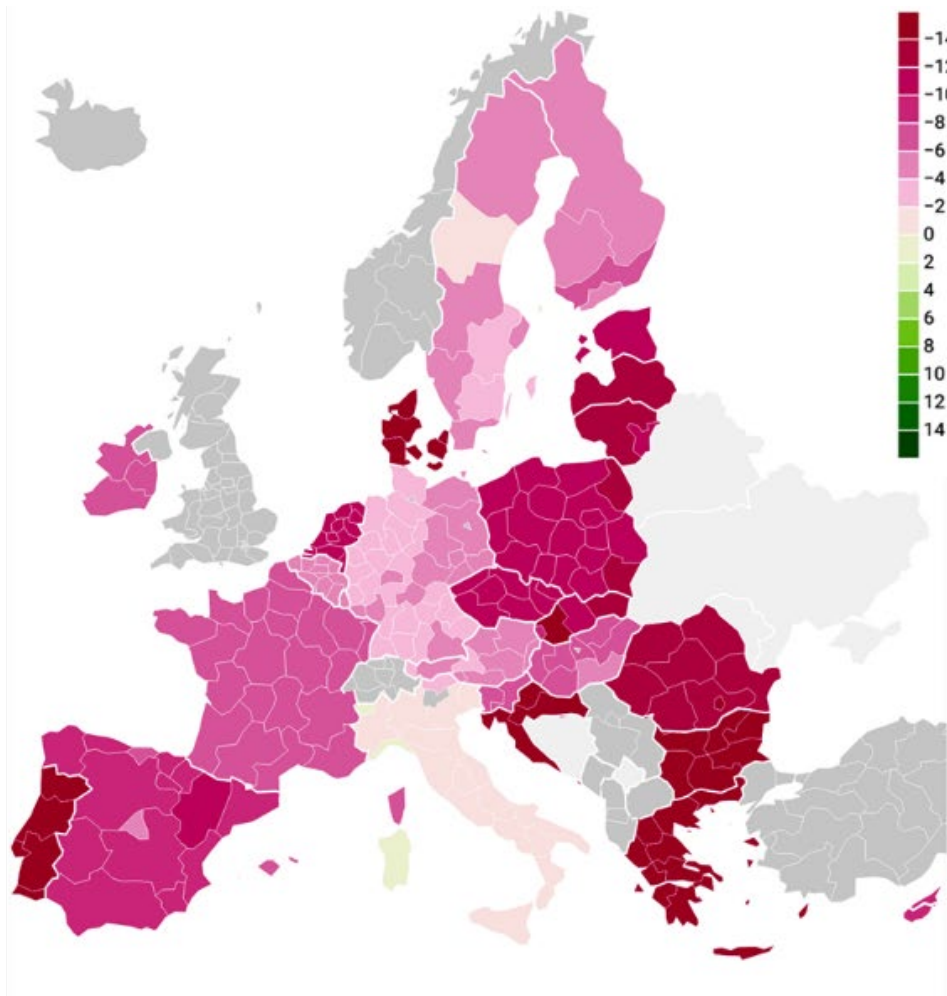


Domestic use

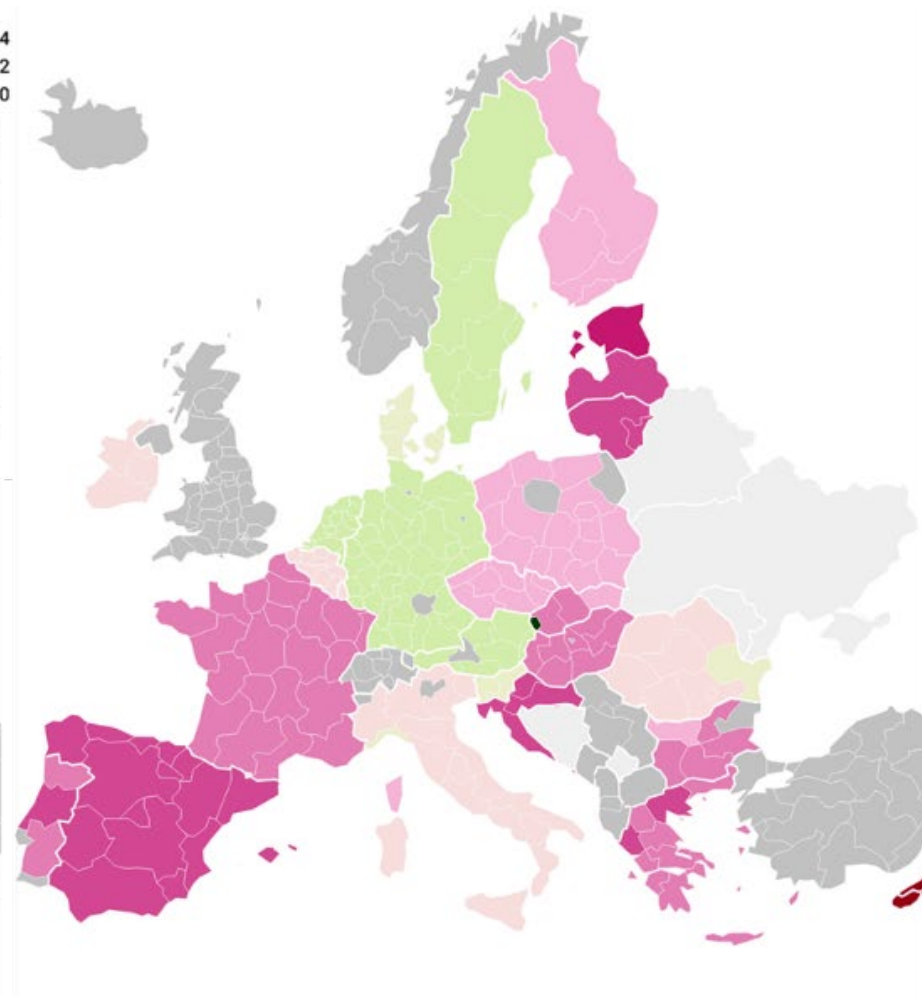


Changes in regional (NUTS-2) production in Scenario B1 (2035)

PORK MEAT



EGGS



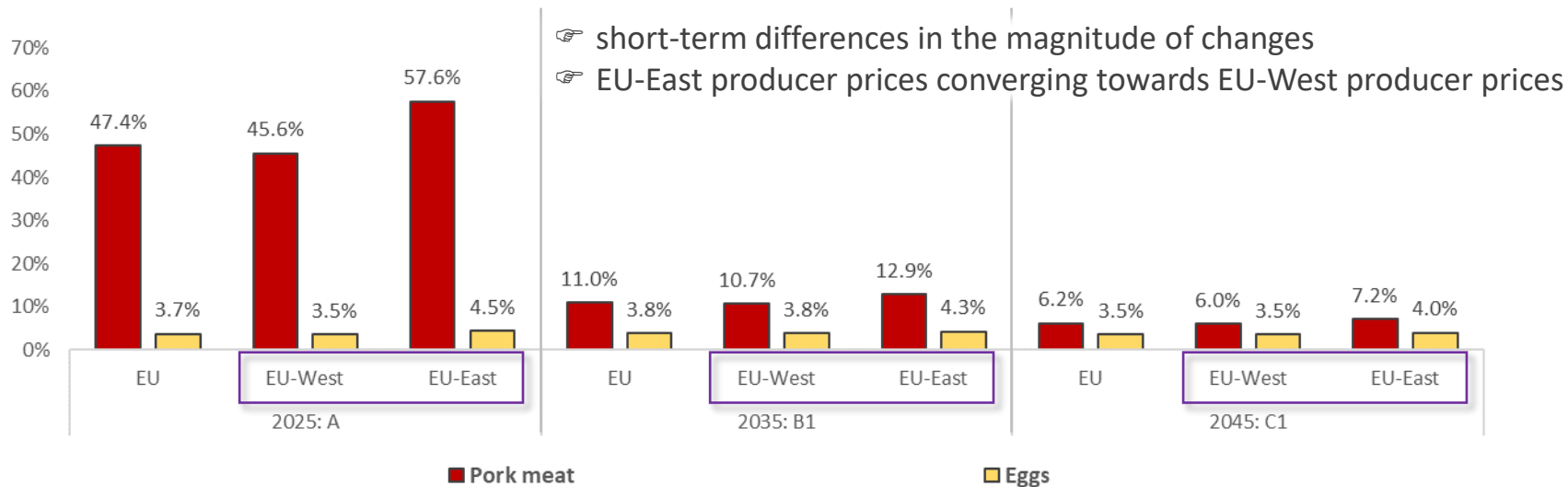
Estimated changes in the net trade with third countries



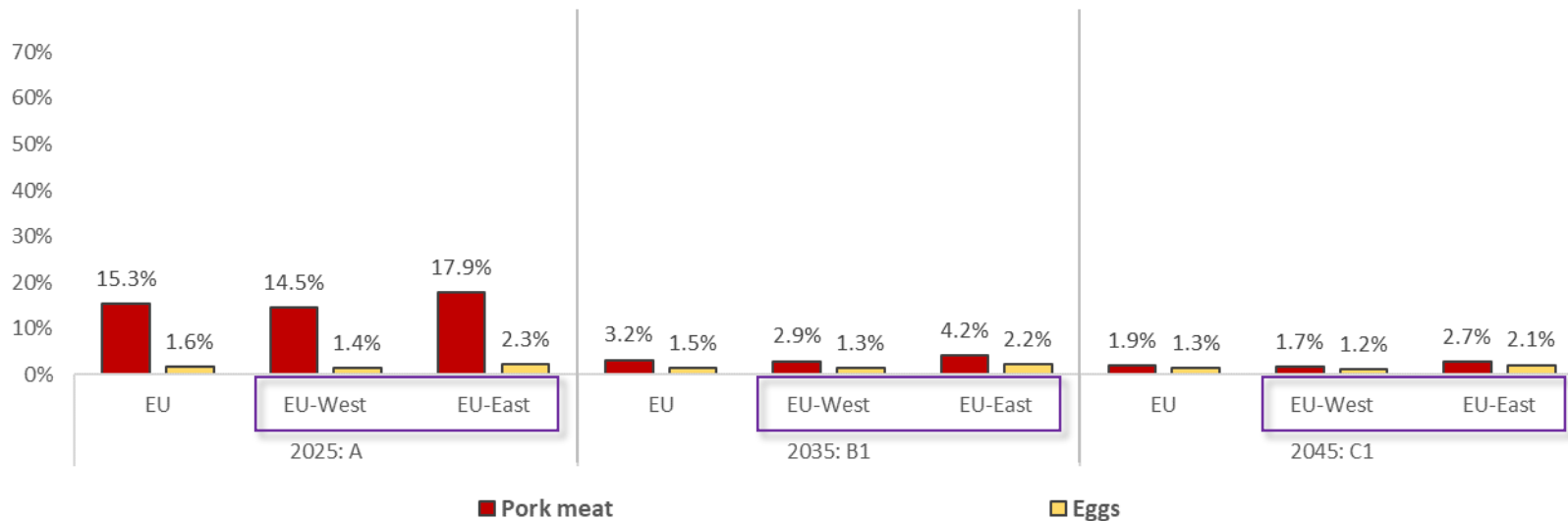
- ☞ pork meat exports drop by 87% while imports increase eleven-fold in Scenario A
- ☞ but the EU and EU-West remain net exporters of pork meat even in Scenario A
- ☞ pork meat trade balance significantly impacted in Scenarios B1 and C1 too
- ☞ trade in eggs less impacted

Estimated changes in prices

Producer prices



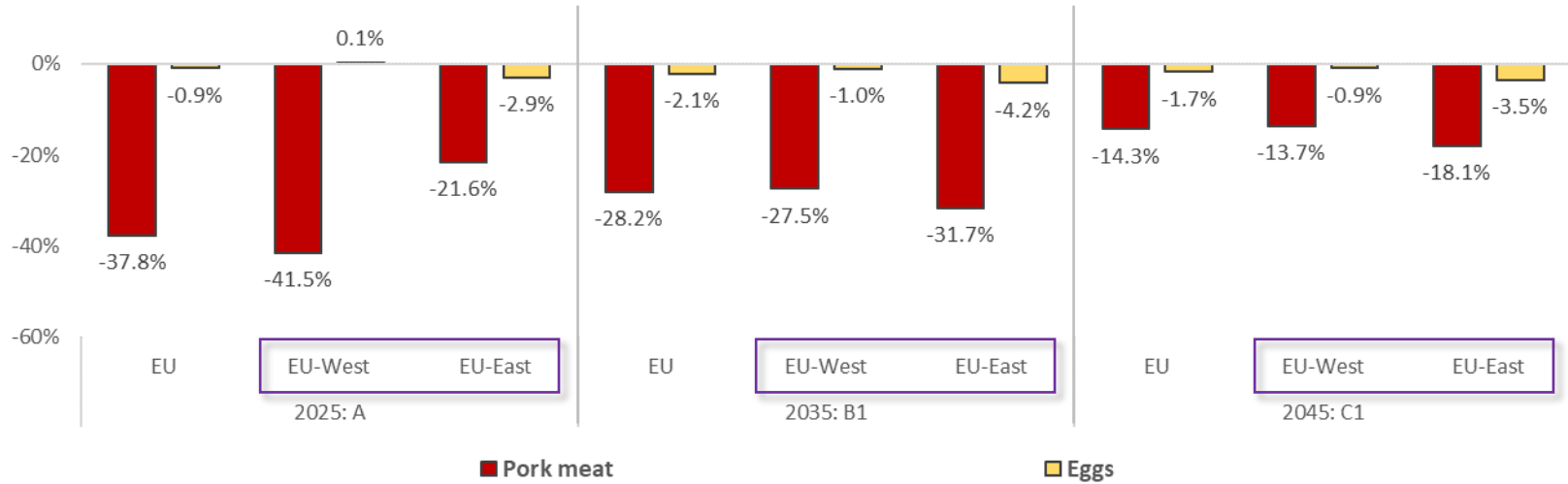
Consumer prices



Estimated changes in profits and in macroeconomic indicators

Profits

👉 position of pork meat in the EU-West to reverse over time owing to its improving relative competitiveness

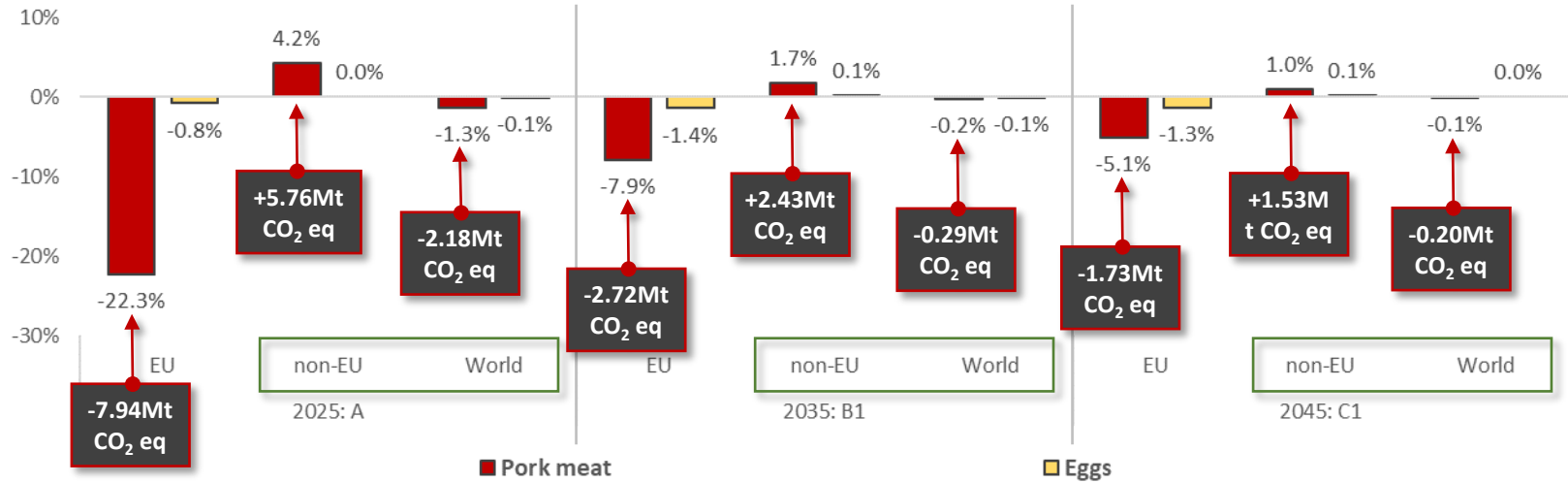


| Selected macroeconomic indicators for the EU-27 | Scenarios | | |
|---|-----------|-------|-------|
| | A | B1 | C1 |
| Agricultural income | -1.7% | -1.5% | -1.2% |
| EAA output | +5.8% | +1.5% | +1.0% |
| Output crops | -0.8% | -0.3% | -0.2% |
| Output animals | +12.6% | +3.2% | +2.0% |
| Tariff revenues | +7.0% | +1.6% | +1.1% |
| Consumer purchasing power | -0.1% | -0.0% | -0.0% |
| Taxpayers' total cost | -0.1% | -0.0% | -0.0% |

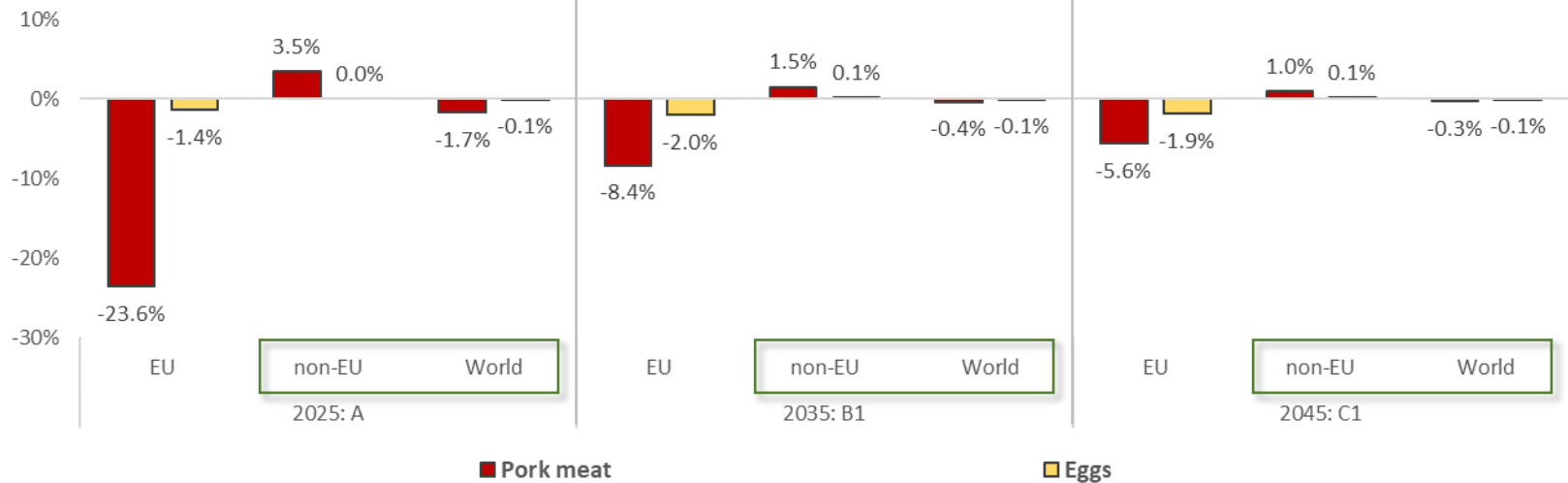
Estimated changes in the GWP

GWP

👉 GWP increase in non-EU pork meat production



Production



Main conclusions

- ☞ difference in the magnitude of changes for pork meat and eggs in
 - production
 - consumption
 - trade
 - prices
 - producer profits
- ☞ magnitude of changes declining with increase of the transition period
- ☞ a divide between EU-West and EU-East
- ☞ negligible impact on consumer purchasing power and no burden on taxpayers
- ☞ EU GWP decrease compensated by non-EU GWP increase to a great extent



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Thank you for your attention

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