



# Policy Mixes for Resource Efficiency - Findings of POLFREE

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# Outline



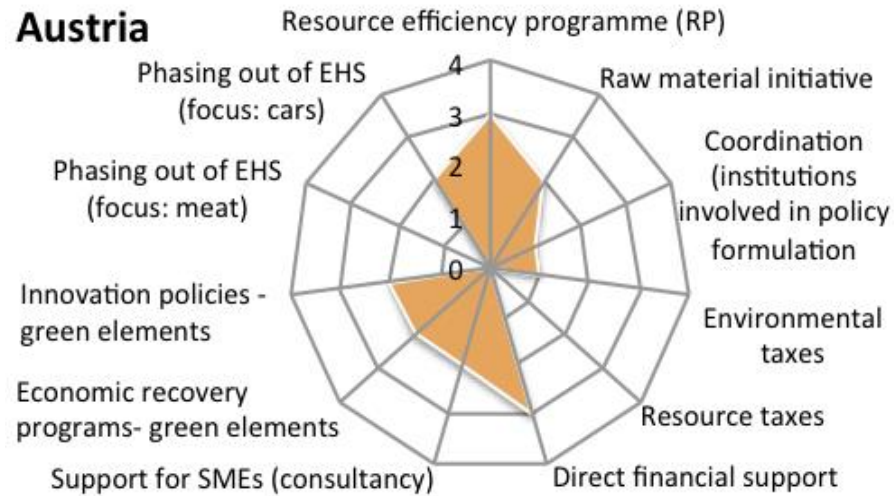
1. What kind of policy framework is needed to boost resource efficiency in Europe and leads to total reduction of both primary resource use and global environmental burdens?
  2. How can such a policy framework be formulated and implemented?
- POLFREE approach
  - Analytical results with regard to policy mixes
  - Conclusions

# Institutions and actors of resource markets: polycentric and multi-level governance

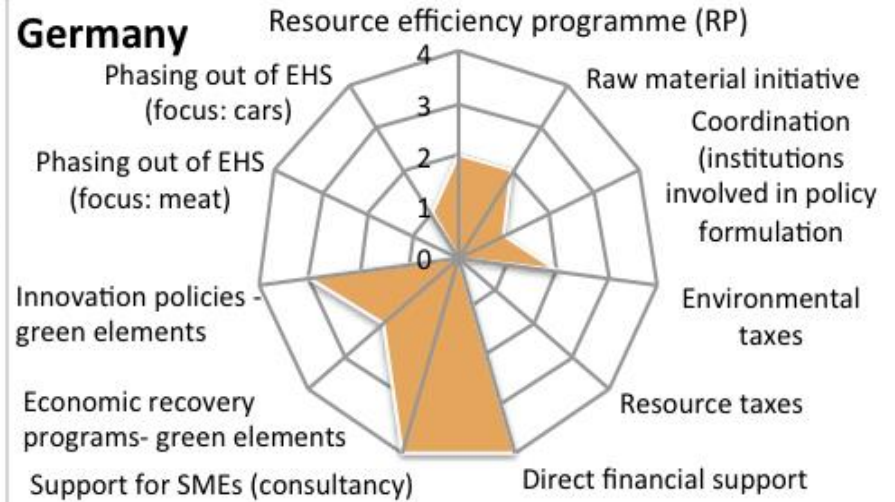


# National contexts for RE policy mixes

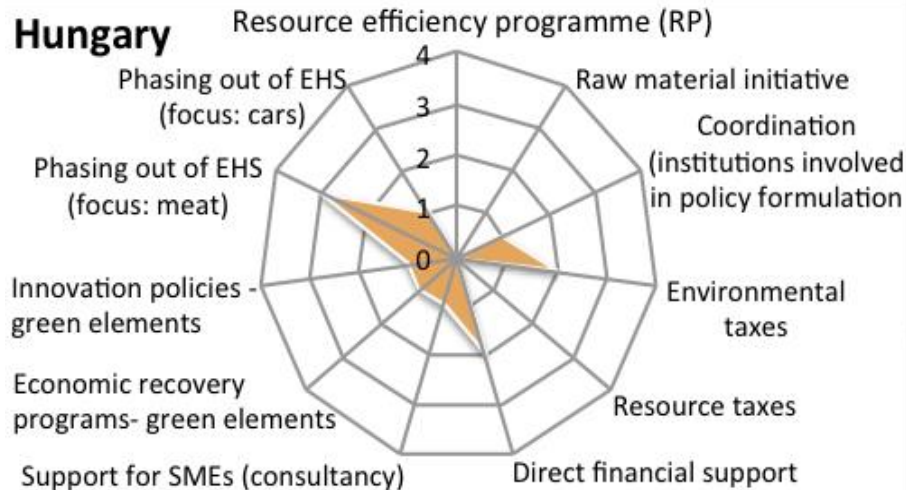
## Austria



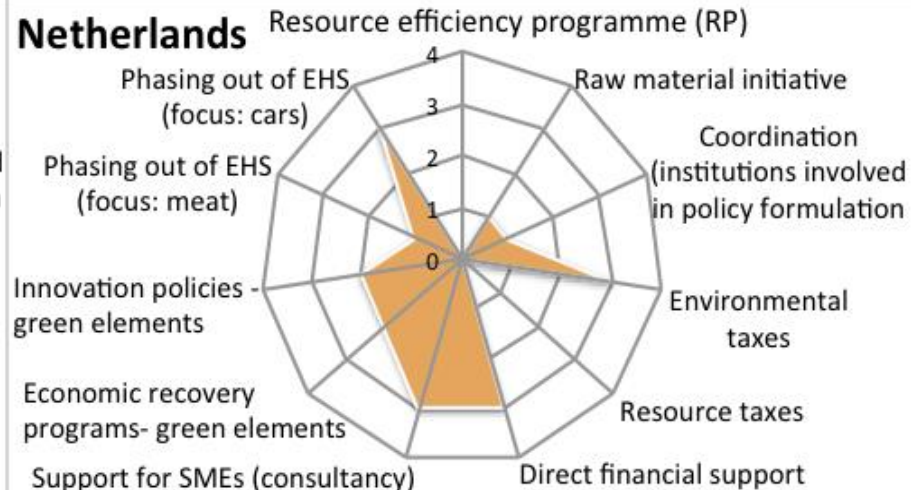
## Germany



## Hungary



## Netherlands



## National contexts for RE policy mixes

### The “web of constraints” as crucial starting point for policy mixes

- Largely unexploited potentials especially with regard to eco-innovation and related investments.
- Lack of ambitious goals and a general uncertainty what a focused and targeted transformation to an improved resource management could mean.
- Role of national key sectors and their quantitative and qualitative contribution to path dependencies widely not transparent and unexplored

# Topics for the Case Studies

List based on the policy mix workshop, stakeholder workshops and the POLFREE vision for 2050

- 1) Minimization of food waste losses alongside the value chain
- 2) Zero energy and material efficient buildings
- 3) Mobility
- 4) Electricity production and distribution
- 5) Industrial symbiosis network
- 6) Product Service Systems
- 7) Ecodesign Product Standards for a Circular Economy
- 8) Phasing out EHS
- 9) Internalization of costs

# Common Structure for the Case Studies

- Context – Why is the topic relevant for a radical increase of RE? Vision and pathways? Ongoing projects? Literature?
- Instruments – Selection of three instruments:
  - 1) “win-win” instrument,
  - 2) instrument with hard market interventions,
  - 3) instrument focussing on the consumption side

What are effects? Experiences (national/ regional)? On which spatial level should it be implemented?

- Implementation – Relevant barriers? Winners, losers? Veto players? “Flanking instruments” to distribute expected welfare benefits?

# Instruments

## Supporting Product Service Systems

- Pathway 1 (“win-win”): Assessment procedures for life cycle costs and impacts; awareness raising campaigns
- Pathway 2 (“market intervention”): Include PSS solutions in EU Ecolabel in combination with public funding of pilot projects
- Pathway 3 (“green world”): Include PSS in public procurement decision criteria



# Instruments

## Ecodesign Product Standards for a Circular Economy

- Pathway 1 (win-win): Individual Producer Responsibility and better recycling targets
- Pathway 2 (hard market interventions): Mandatory ecodesign standards for reuse and repairability
- Pathway 3 (consumption side): Shifting waste infrastructure investments into networks for reuse and repair

# Instruments

## Industrial Symbiosis

- Pathway 1 (“win-win”): Regional facilitated IS programmes linked through an EU wide IS coordination body
- Pathway 2 (“market intervention”): Landfill taxes and bans and end of waste criteria
- Pathway 3 (“green world”): Incorporating IS requirements in regional planning and activity permits

# Instruments

## Fuel efficient mobility

- Pathway 1 (“win-win”): CO<sub>2</sub> vehicle emission standards (a pathway descending to about 50 gram/km by 2050)
- Pathway 2 (“market intervention”): a demand-side instrument: increase vehicle tax and connect it to CO<sub>2</sub> emission level (high VAT & road tax, strongly connected to Energy labels)
- Pathway 3 (“green world”): urban governments start giving priority to non-car infrastructure (notably public transportation, Park+Ride, cycling, car sharing, and through car restraining measures).

# Instruments

## Phasing out EHS

- Pathway 1 (“win-win”): Establishment of an inventory for EHS
- Pathway 2 (“market intervention”): Development of a resource-efficiency subvention checklist
- Pathway 3 (“green world”): Automatical decrease for most relevant EHS by 10%/ year

# Criteria for a Policy Mix

- **3 main characteristics of a policy mix:**
  - **consistency, coherence, credibility**

## ***Consistency***

- „ The state of a policy mix that is characterized in its weak form by the *absence of contradictions* and in its strong form by the *existence of synergies within and between the elements of the policy mix, (...)*“
- interaction between different policies (instruments already in place and new ones), mutual benefits with existing policies,
- negative interactions among instruments,
- target conflicts with fundamental social policies

# Criteria for a Policy Mix

## ***Coherence of processes***

- Focus on the process dimension („referring to the processes of policy making and implementation, ensuring that the elements of the policy mix are not in contradiction with one another or may even reinforce one another”)
  - Resource efficiency: policy integration and coordination

## ***Credibility and stability***

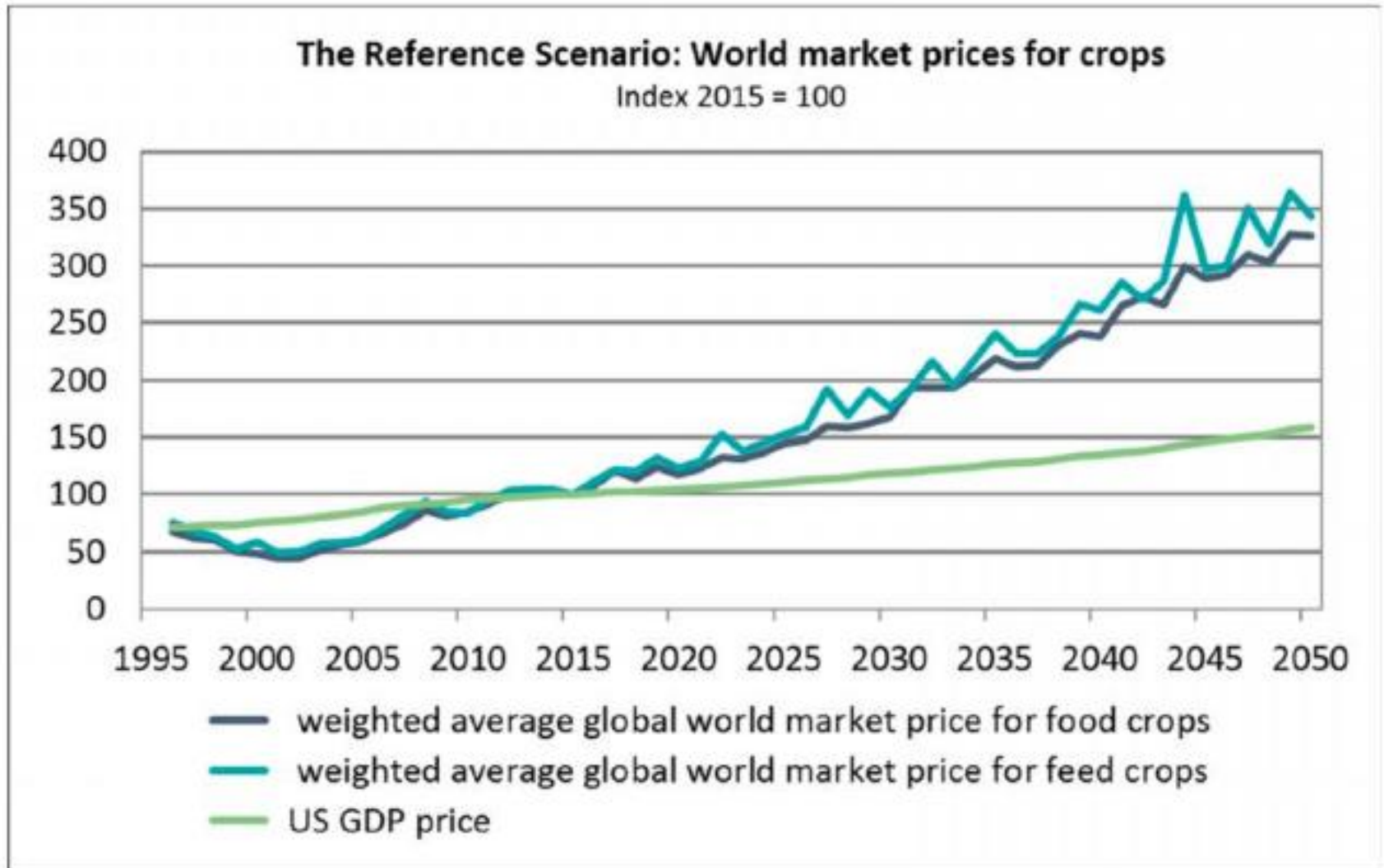
- Extent to which the policy mix is believable and reliable
- Influenced by a range of factors (commitment from political leadership, operationalization of targets by a consistent instrument mix and delegation of competencies)

# Key trade-offs for RE policy mixes

**If resource efficiency and the circular economy are win-win concepts, why don't we see faster progress?**

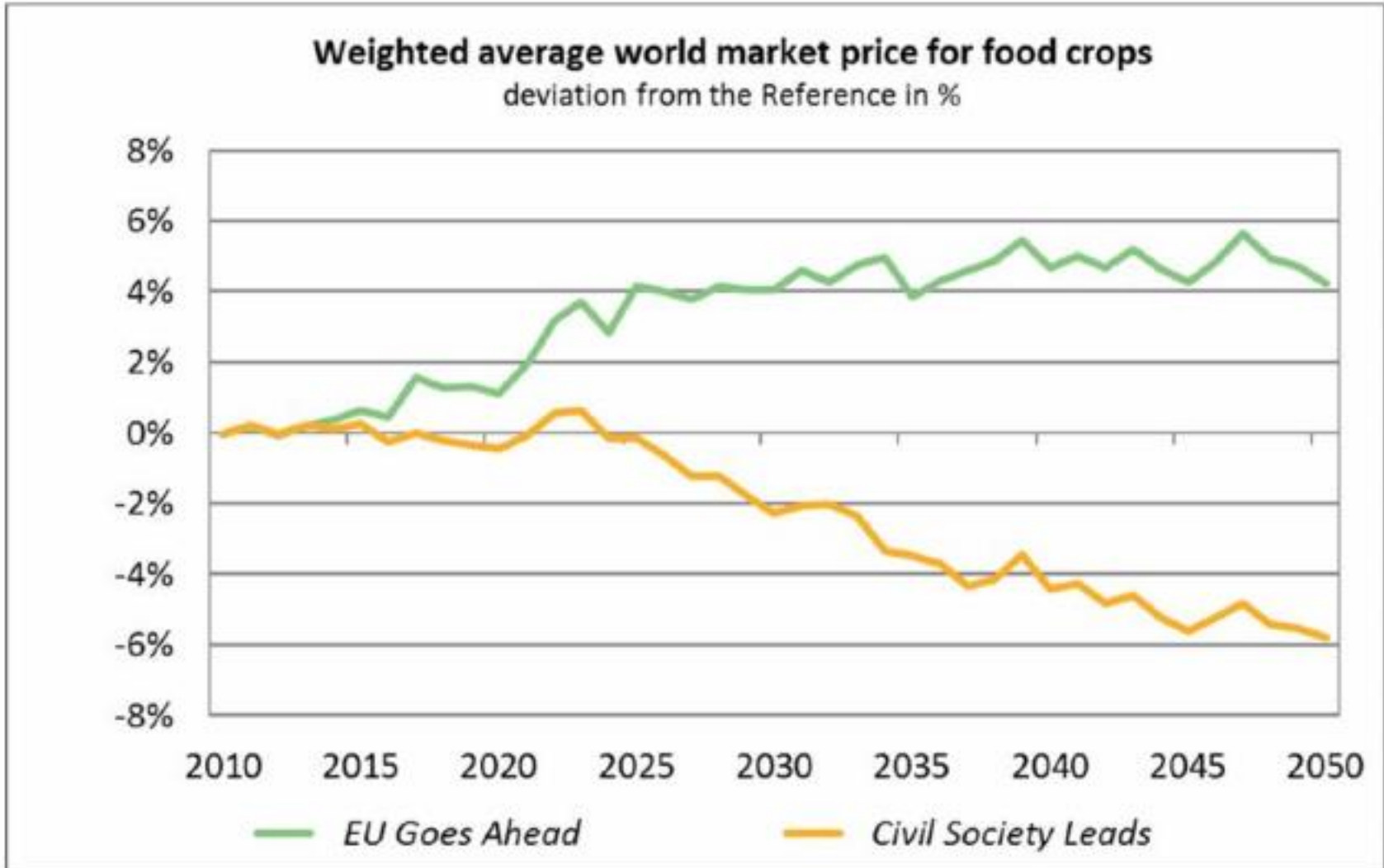
- The more ambitious an instrument, the lower the immediate profitability for the actors involved
- Trade-off between the predictability of an instrument and its flexibility
- Trade-off between the level of specificity of an instrument and its depth, the level of inclusions of up- and down stream actors

# Macro-economic results

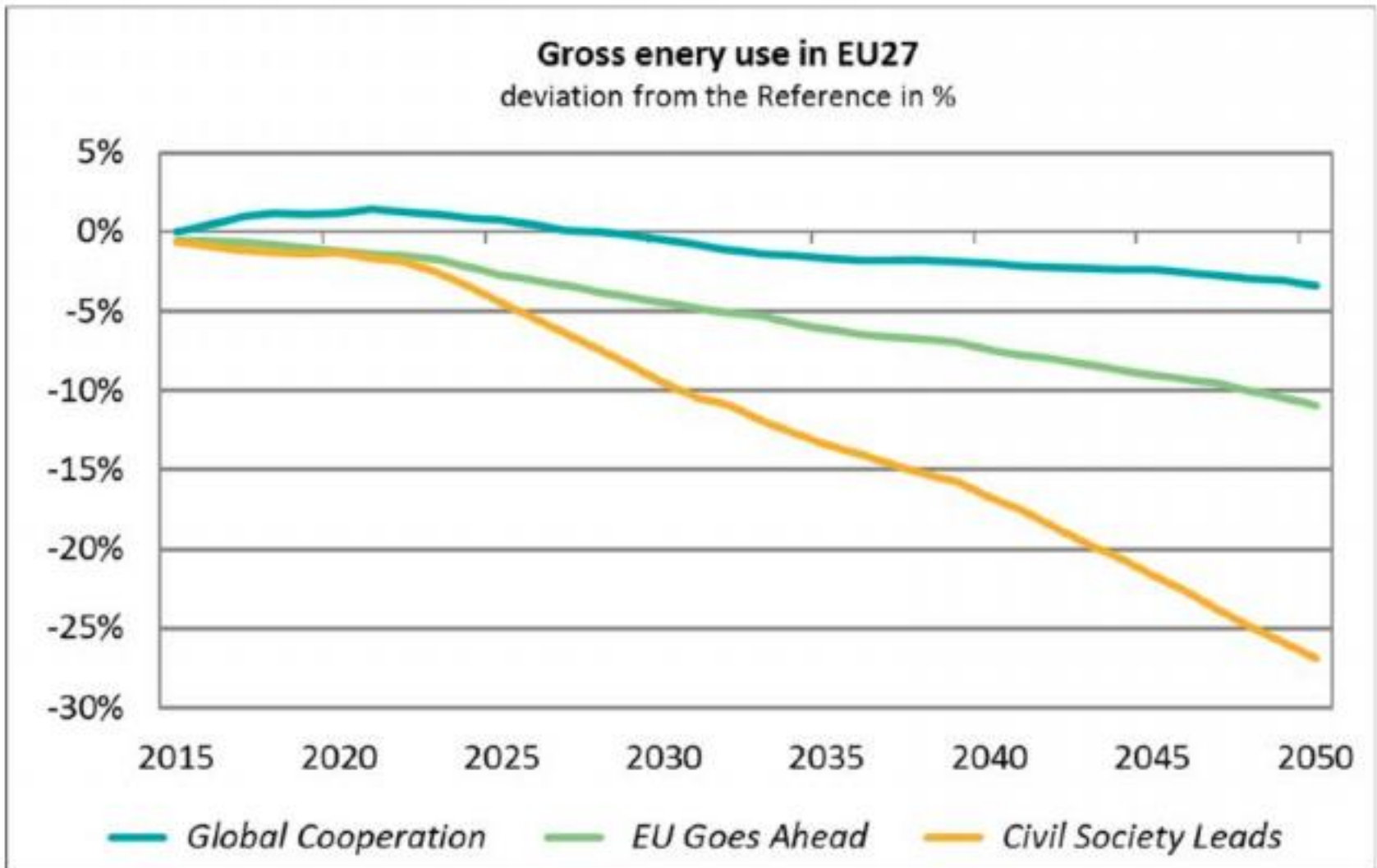




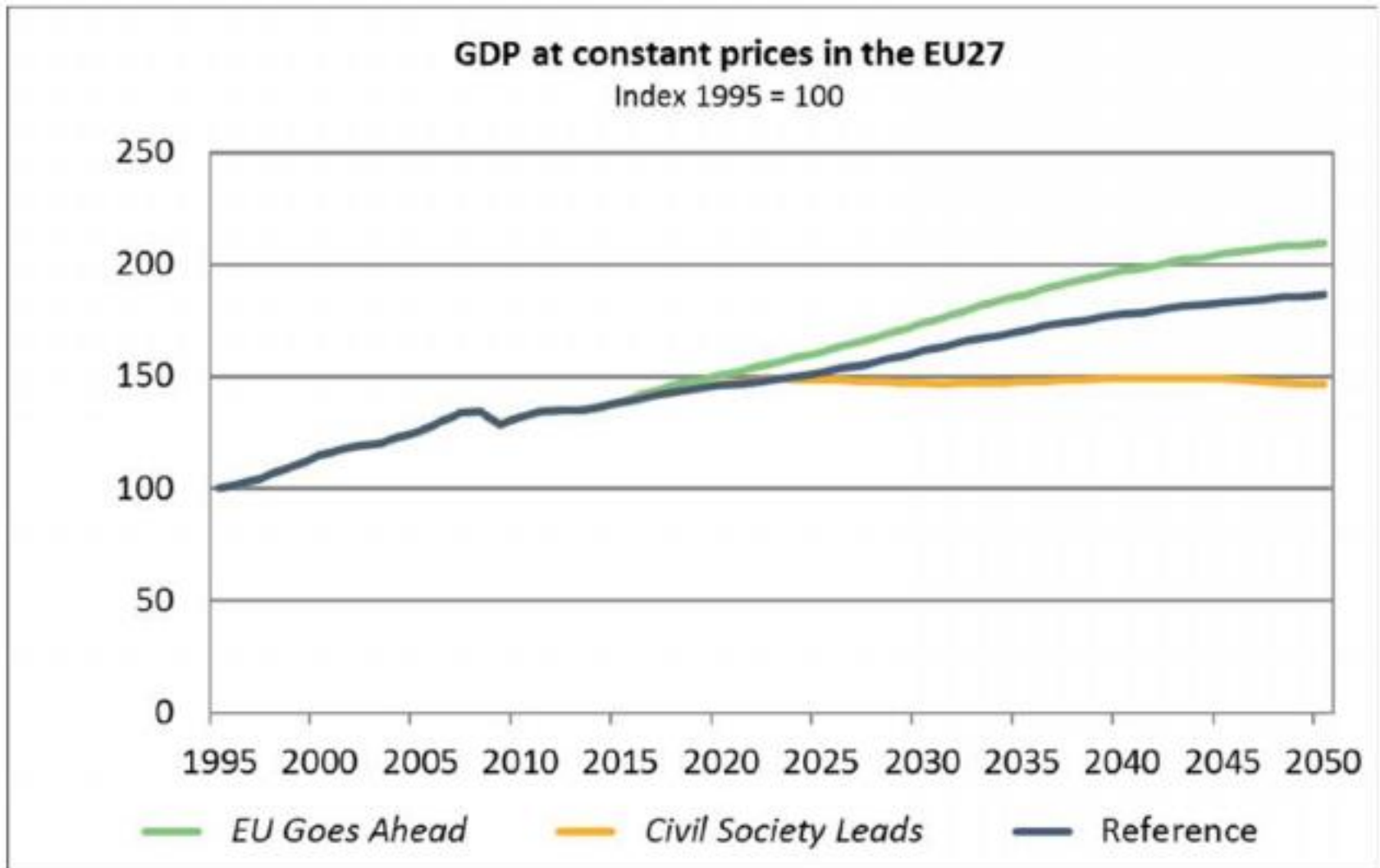
# Macro-economic results



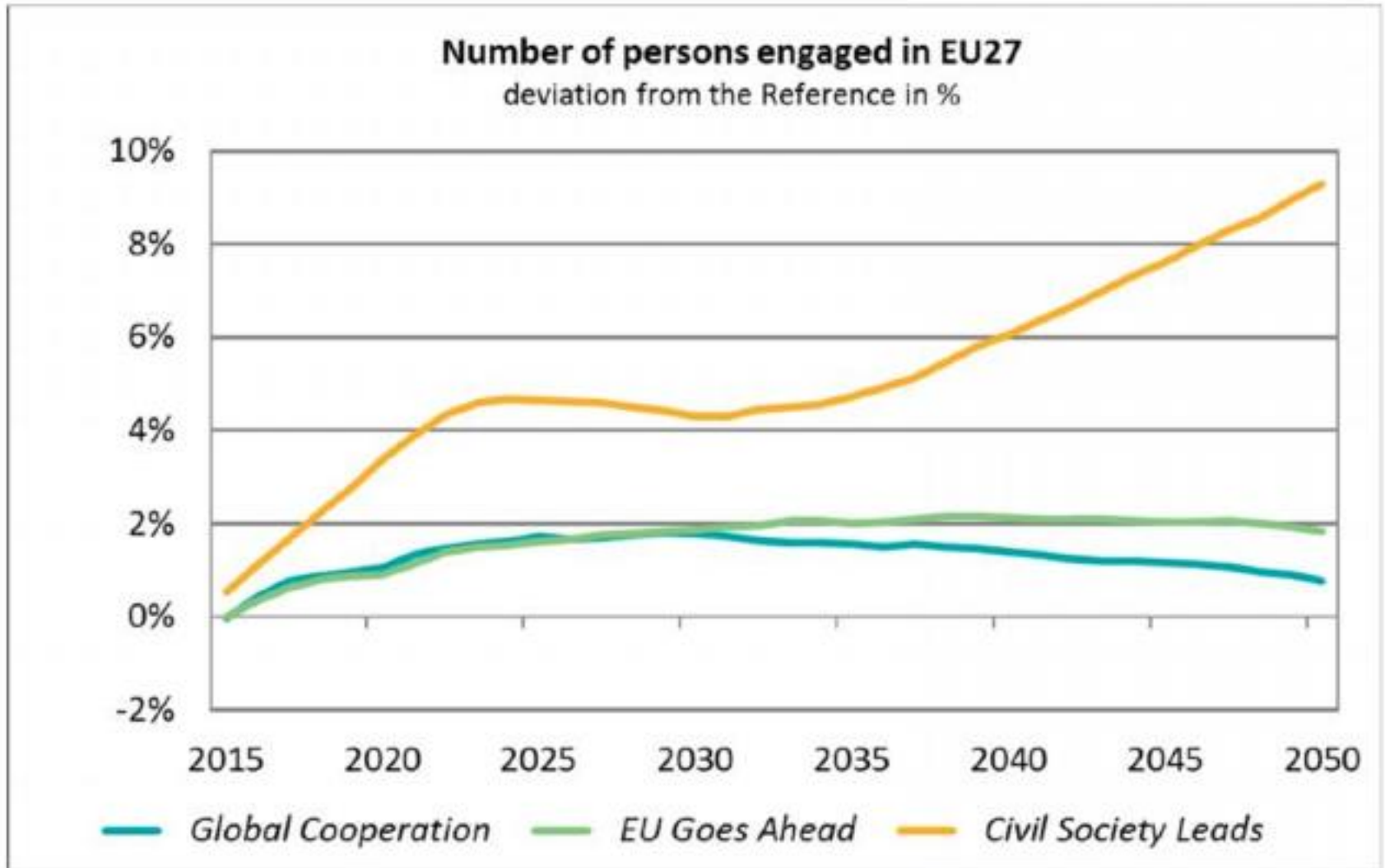
# Macro-economic results



# Macro-economic results



# Macro-economic results



# Conclusions

- Despite the achievements of RE policies, overusing natural resources is still a “rationale choice”
- Market-based instruments enable to quick results but will not be sufficient to achieve a resource-efficient Europe
- Policy frameworks are needed that effectively inform, influence and steer consumption patterns, starting with public demand



**Thank you very much!**

