

SEEA as a framework for assessing policy responses to climate change

Prepared for the UNCEEA meeting

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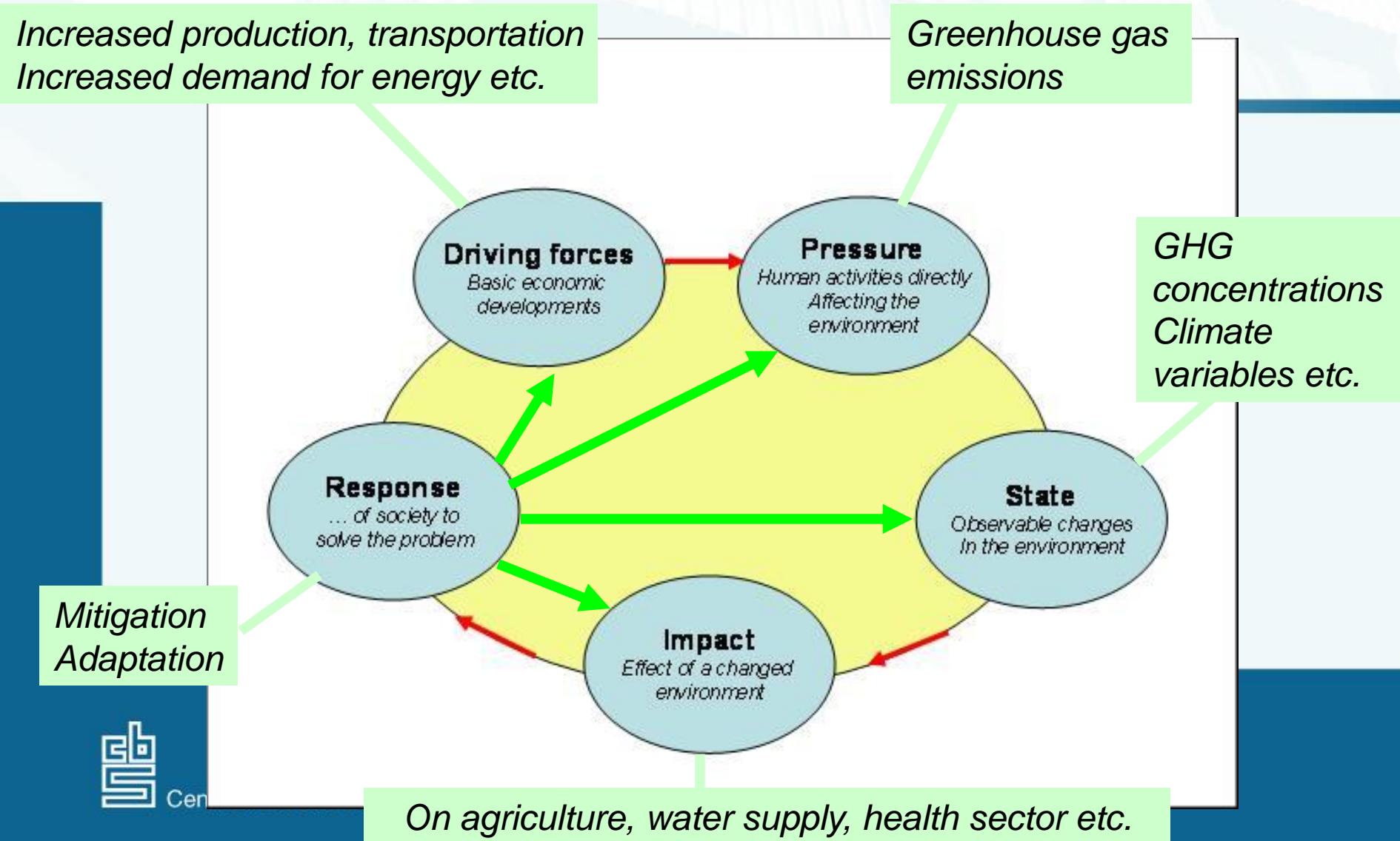


Content

- Climate change and the economy
- Climate change policy issues and SEEA
- SEEA applications for mitigation
- SEEA applications for adaptation
- Conclusions



the DPSIR framework



Climate change policies issues and SEEA

1. *To what extent is human induced climate change actually taking place ?*
Can SEEA be used ? → NO !
2. *What actions need to be taken to reduce the emissions of greenhouse gasses ?*
Can SEEA be used → Yes !
3. *What actions need to be taken to deal with the consequences of global warming and minimize the impacts ?*
Can SEEA be used → Yes !

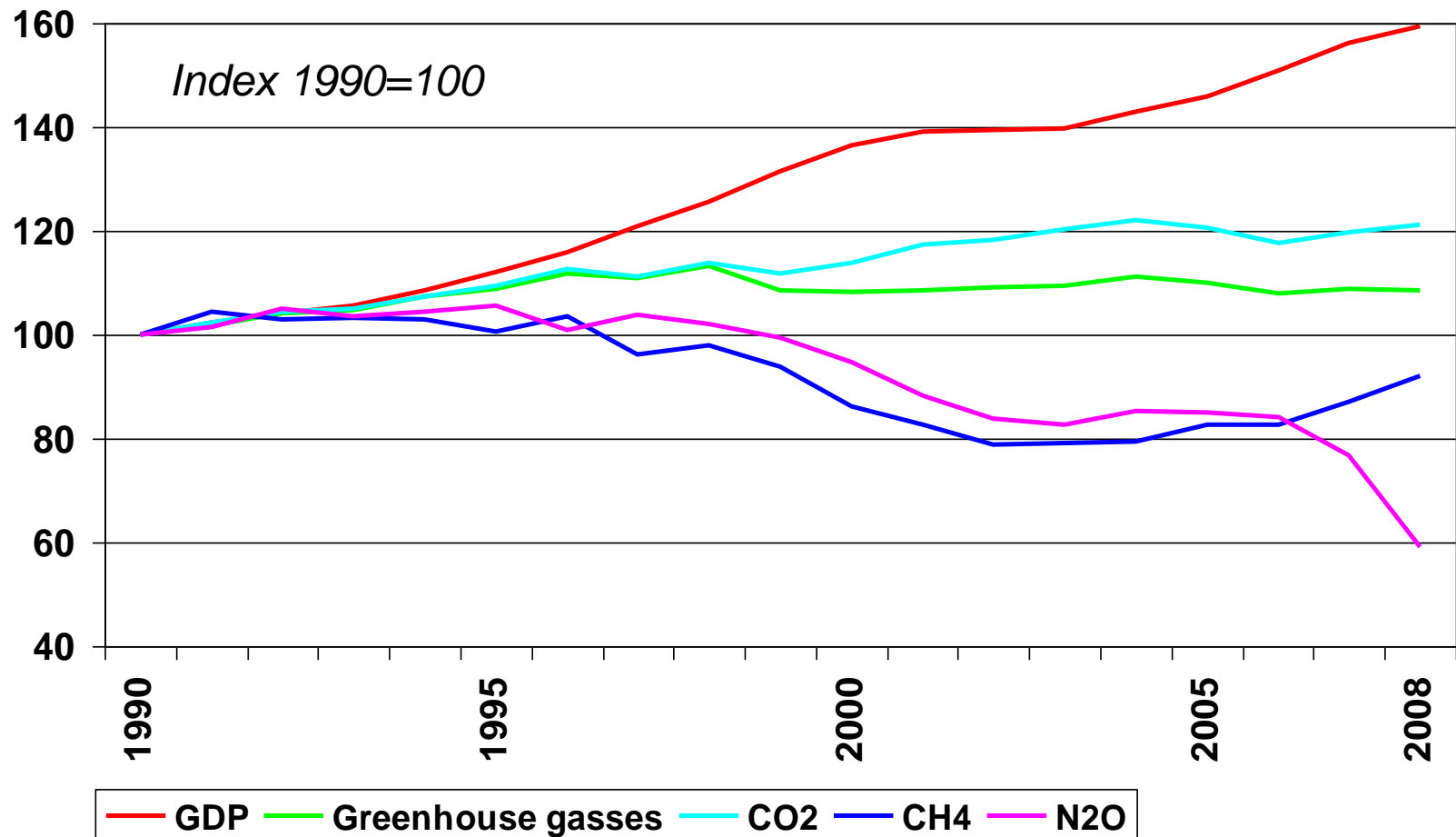
Climate change in Volume III of SEEA

- One of the central issues in Volume III
- Focus on applications for mitigation and adaptation policies
- Examples of answers to direct policy questions

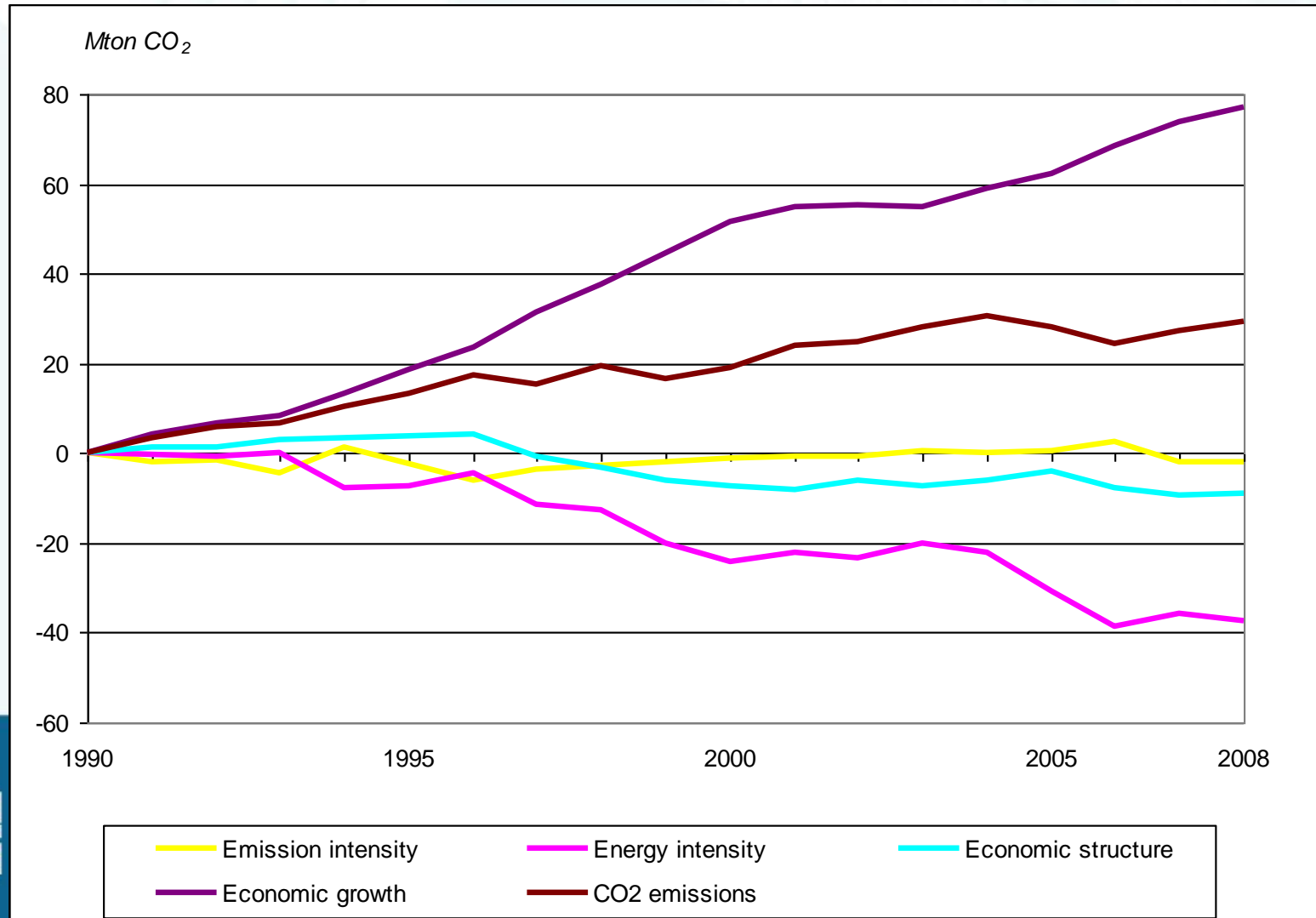
SEEA applications for mitigation policies

- Understanding the drivers of climate change
- Monitoring and analysis energy saving and renewable energy
- Monitoring policy instruments for mitigation
- Determination and analysis of costs and benefits of mitigation policies

Are the production induced GHG emissions decoupling with respect to economic growth ?



How can the change in GHG emissions over time be explained ?

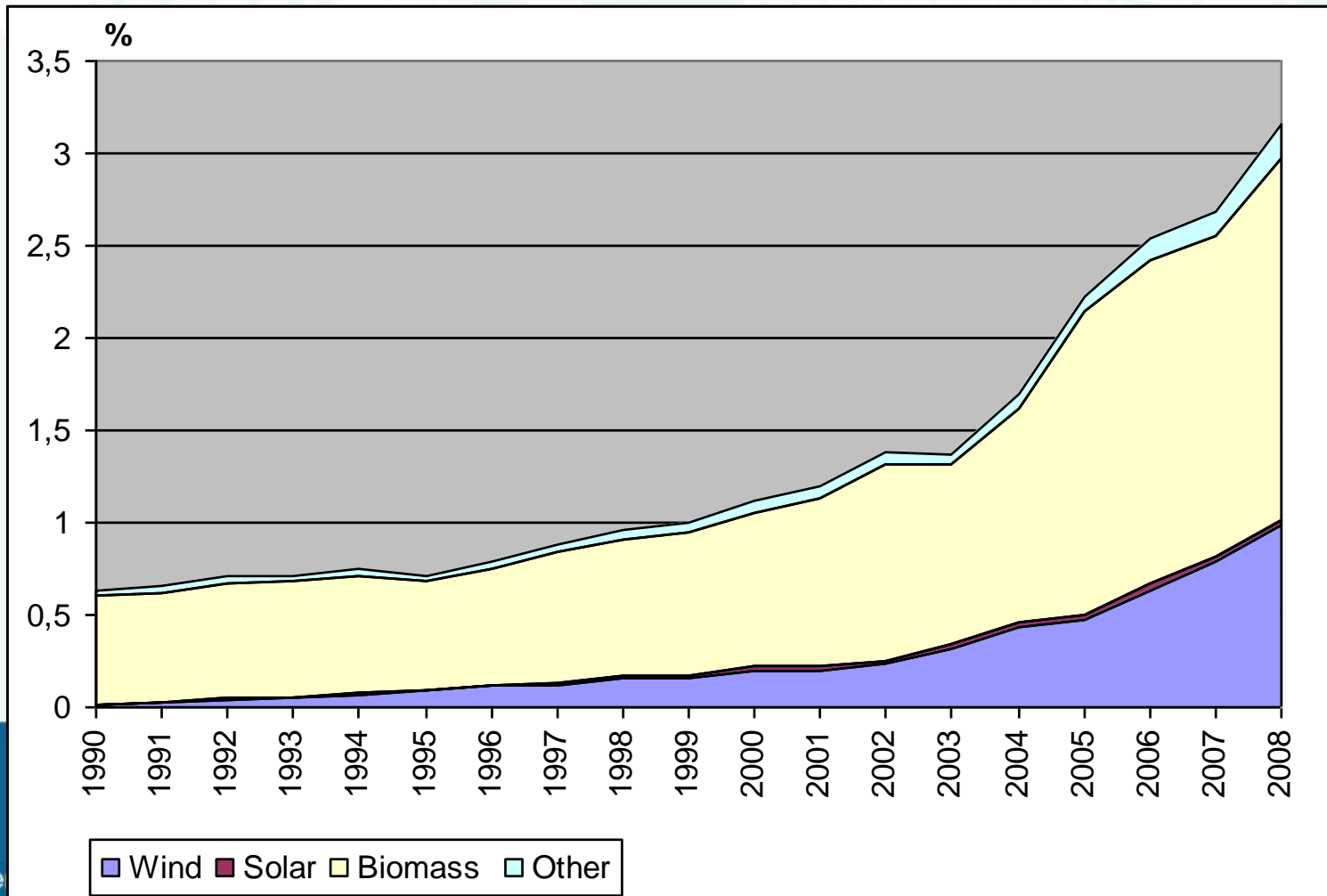


What is the national carbon footprint ?

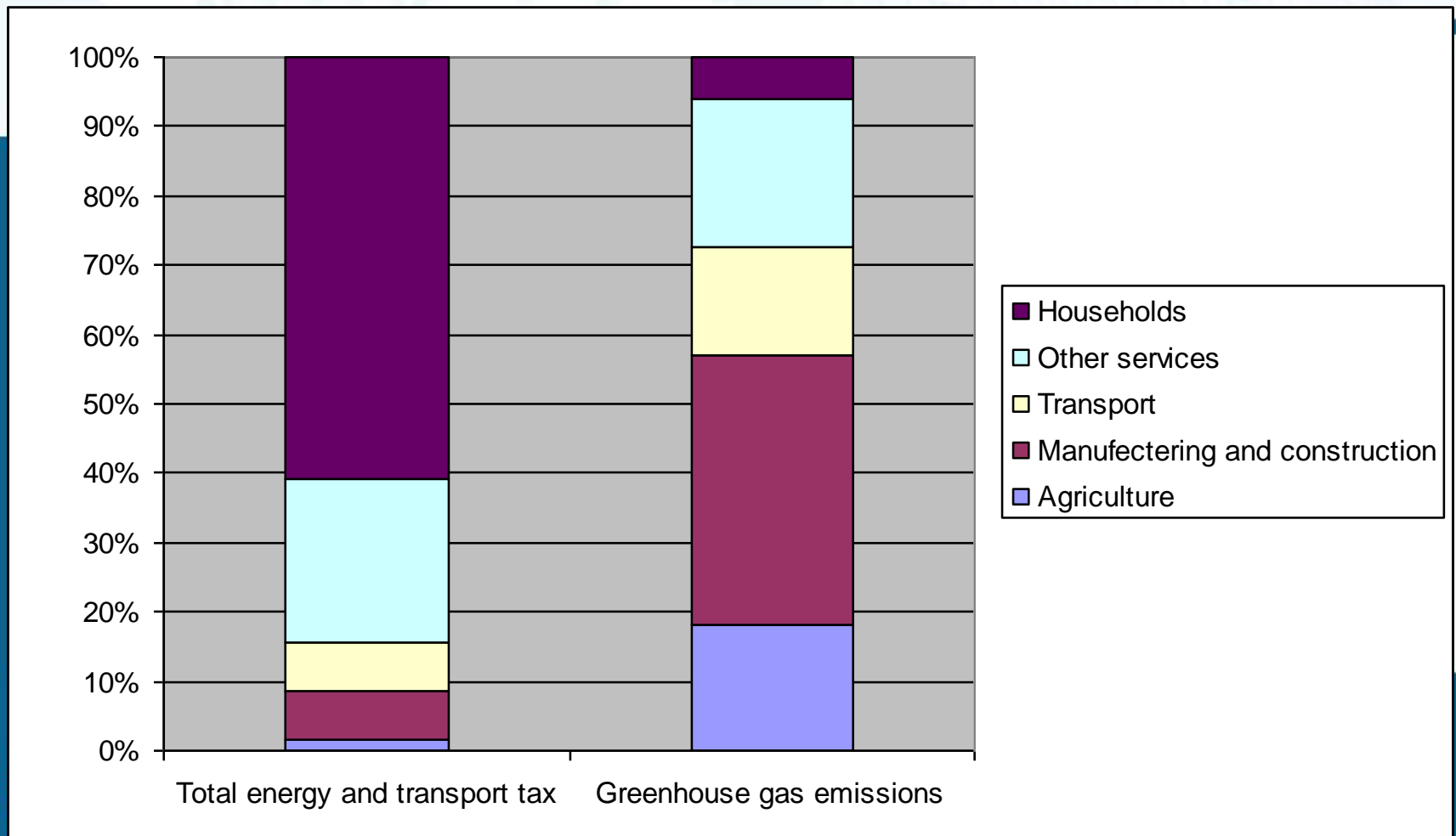
	Total GHGs	CO ₂	CH ₄	N ₂ O
	<i>Mton CO₂-equivalenten</i>			
1. Emissions attributed to import	227	157	53	18
2. Emissions attributed to export	181	147	12	21
3. The environmental balance of trade = 2-1	- 47	- 10	- 42	3
4. Net emissions by residents	236	201	17	16
5. Environmental consumption (national carbon footprint) = 4-3	283	212	59	13



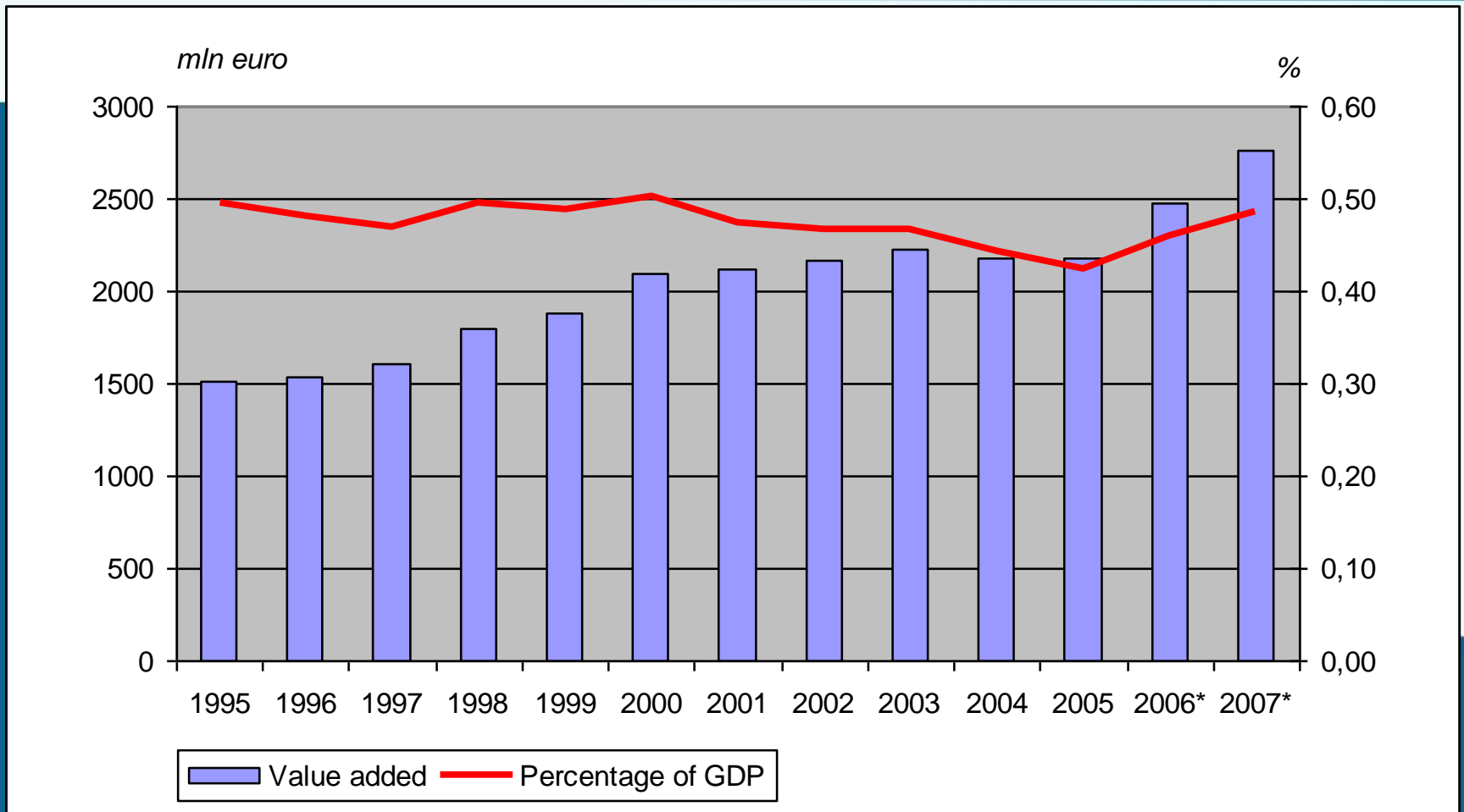
What is the share of renewable energy in the total energy consumption ?



Taxes on energy and transport: to what extent does the 'polluter pay principle' apply ?



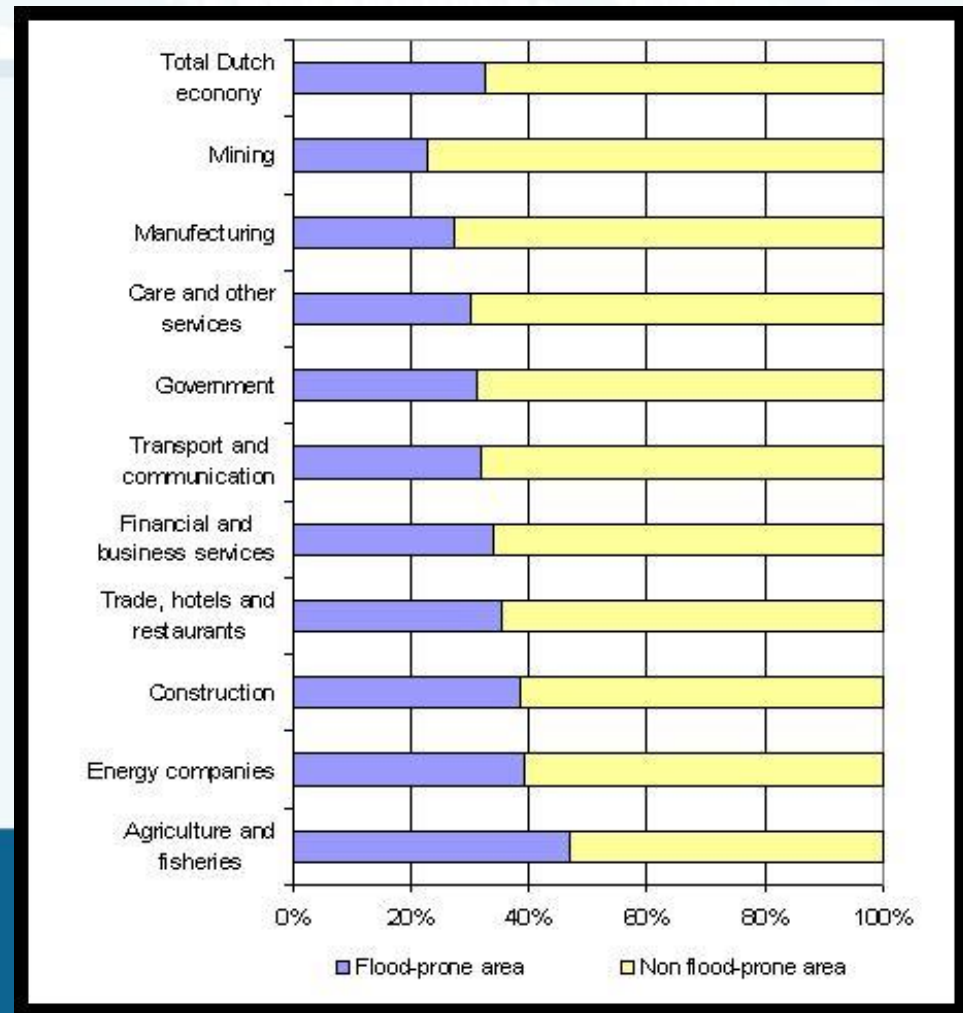
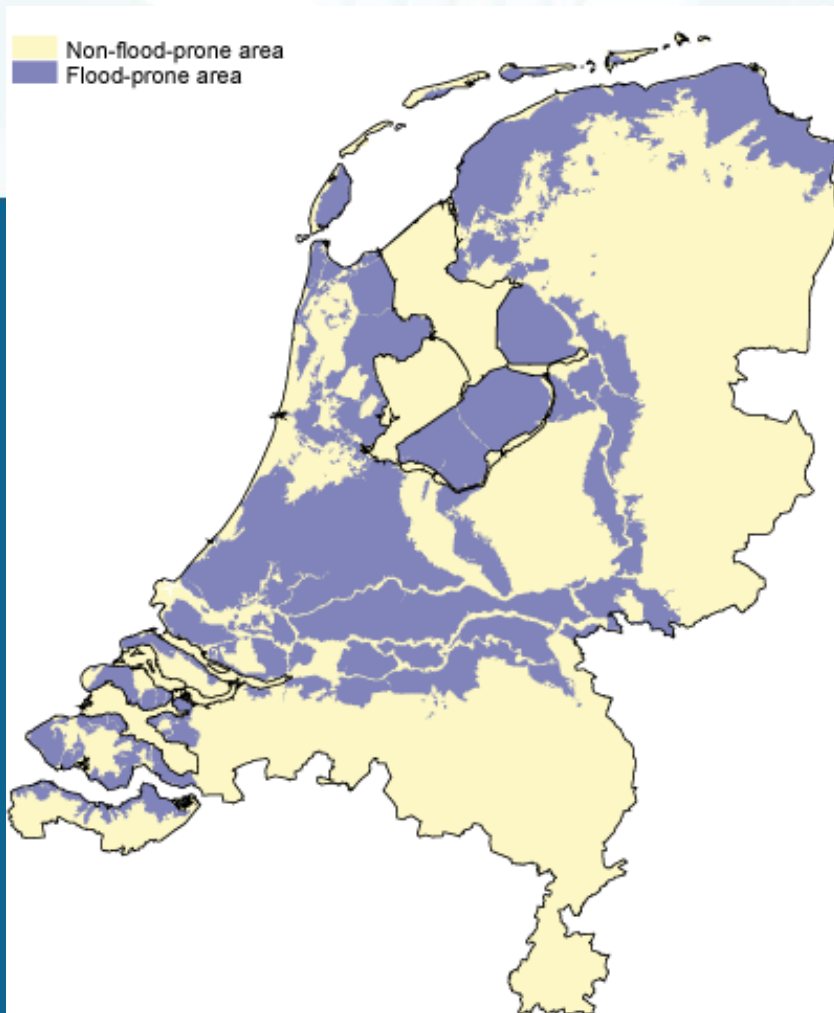
How much are mitigating activities contributing to economic growth ?



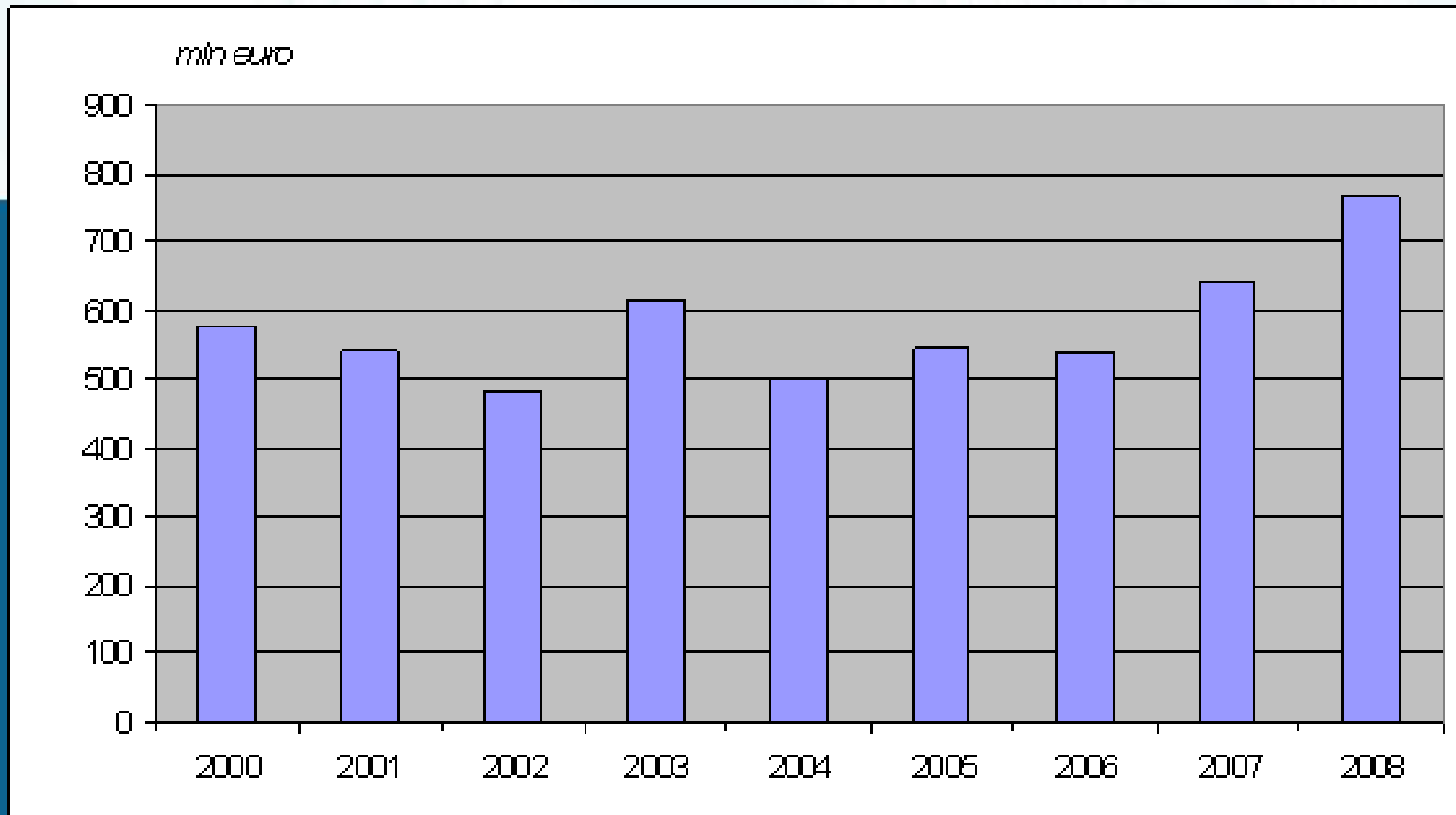
SEEA applications for adaptation policies

- Assessing the impacts of climate change
- Monitoring and analysis of policy instruments for adaptation
- Determination and analysis of costs and benefits of adaptation policies

What is the potential economic impact of a sea level rise ?



How much does a government spend on climate change adaptation measures ?



Expenditures on the maintenance of dikes and seawalls

Conclusions

- The SEEA, together with the SNA and related satellite accounts, has the potential **to bring together in one consistent analytical framework** all relevant information with regard to the relationships between the economy and climate change, that can be used for climate change assessment, policy and decision making.
- SEEA as an integrated framework is particularly suitable to assess the policy responses to climate change. It provides all the essential information to monitor, understand and analyse the relation between the economy and climate change essential for developing both **mitigation and adaptation strategies**.