

Multilateral Assessment Sweder Ars Ronnås
Ambassador
Progress in achieving targets
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Ambassador for Climate **Susanne Åkerfeldt**Senior Adviser



### Sweden received six written questions

#### **Topics:**

- Estimation of policy impacts
- Use of credits
- Inconsistency regarding scenario assumptions
- Target definitions



# THE ENVIRONMENTAL OBJECTIVES - ONE SYSTEM, MANY GOALS

- Generational goal
- Environmental quality objectives
- Milestone targets

"The overall goal of environmental policy is to hand over to the next generation a society in which the major environmental problems have been solved, without increasing environmental and health problems outside Sweden's borders."

THE GENERATIONAL GOAL

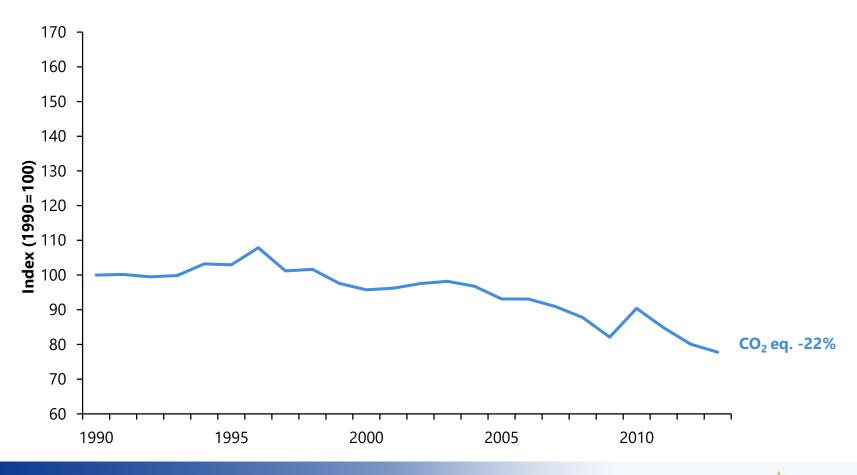




PUTTING THE OBJECTIVES INTO PRACTICE **GENERATIONAL GOAL** AND 16 ENVIRONMENTAL QUALITY OBJECTIVES of objectives FOLLOW-UP AND EVALUATION PROGRESS MADE? **CHANGES IN SOCIETY AND** EFFECTS ON ENVIRONMENT **DECISIONS ON** PROPOSALS FOR POLICY INSTRUMENTS **MEASURES** IMPROVEMENTS 

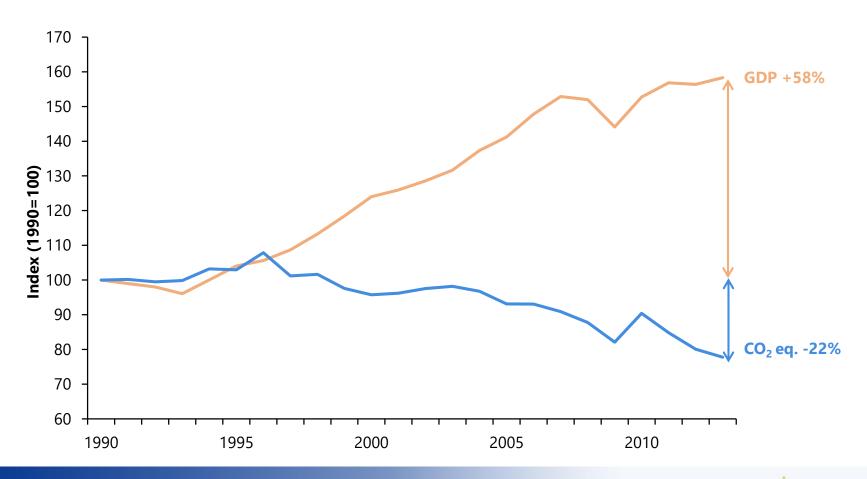


# Reduced emissions can be combined with long-term economic development



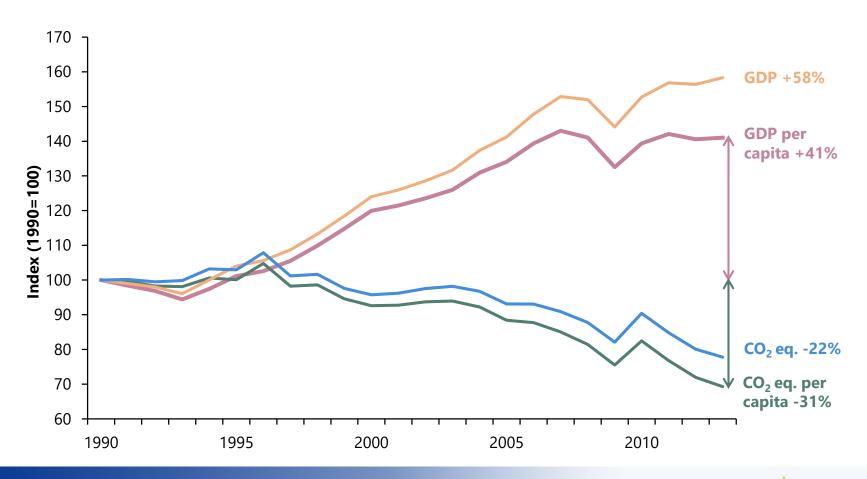


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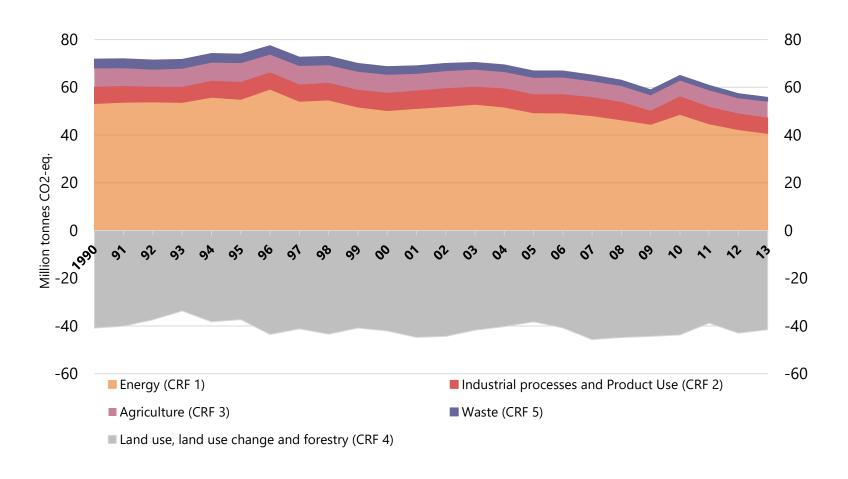


# Reduced emissions can be combined with long-term economic development



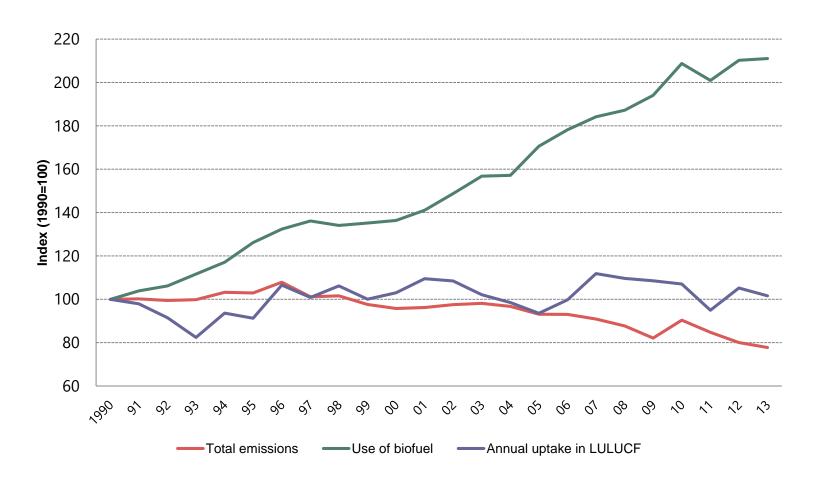


### Reduced emissions without compromising carbon sinks



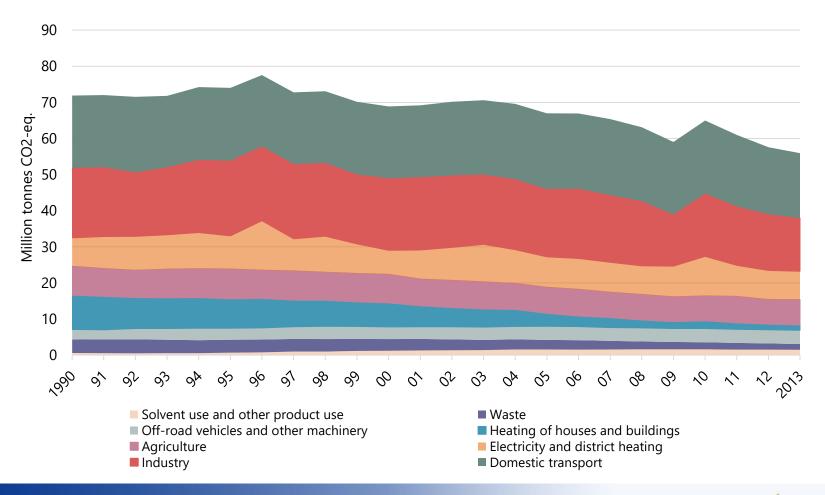


### Switching to bio energy has contributed to emission reductions



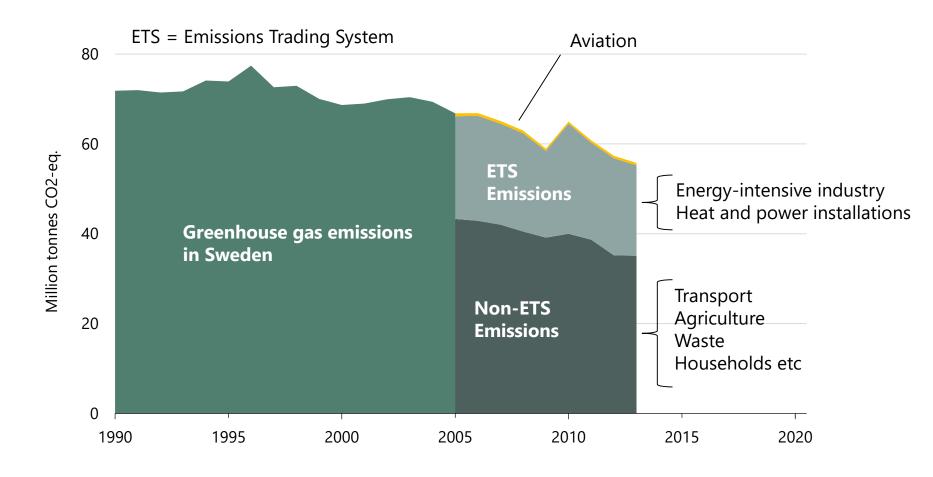


### **Emissions have been reduced across our economy**



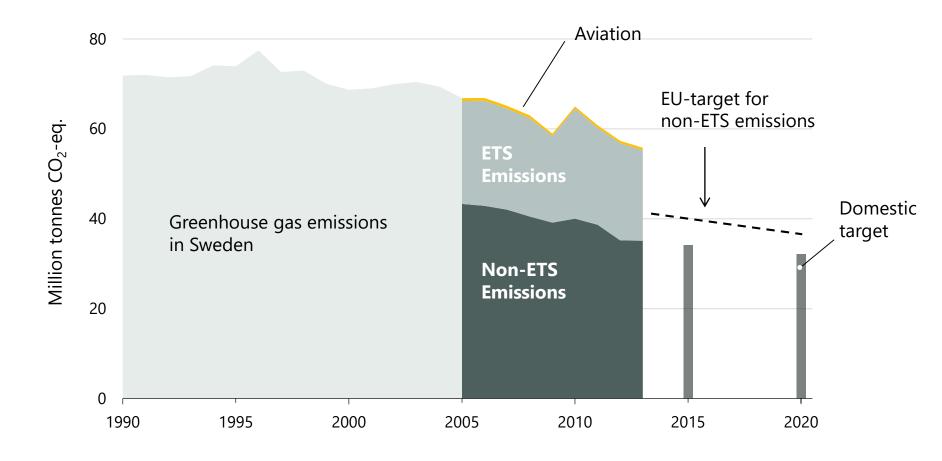


# 37% of Sweden's greenhouse gas emissions were covered by the EU ETS in 2013





## Sweden will fulfill its share of the EU target for non ETS emissions





### **Policies and measures**

#### Prior to 1990

- Town and country planning
- Infrastructure for district heating
- Building standards
- Public transportation

### From 1990's until today

- $CO_2$  tax
- Landfill ban on certain kinds of waste
- Green electricity certificates
- Investment programmes







### **Sweden** has policy instruments in all sectors

Cross-sectoral	Energy supply	Residential	Industry	Product use	Transport	Waste	Agriculture	LULUCF
EU Emissions trading  Energy and carbon dioxide taxes  Local climate investment scheme*  Environmental Code  Planning and Building Act  Communication  Research and Development	EU Emissions trading  Energy and carbon dioxide taxes  Electricity certificates  Special initiatives in support of wind and solar power  Tax relief for micro production of renewable Energy	Energy and carbon dioxide taxes  Building regulations  Technology procurement  Ecodesign Directive and energy labelling  Energy declarations  Climate and energy advice	EU Emissions trading  Energy and carbon dioxide taxes  Energy advice and energy surveys in small and medium sized Enterprises	F-gas regulation National regulation	CO2 standards for new vehicles  Energy and carbon dioxide taxes  Urban environment agreements*  Tax relief on transport biofuels  Requirements of renewable fuels at filling stations  Research and demonstration  CO2-based annual vehicle tax  Super green car rebate  Car benefit taxation  Infrastructure	Landfill directive Landfill tax Ordinance on landfilling of waste with bans on landfilling and on requirements on methane recovery Producer responsibility Municipal waste planning Requirement	Rural Developmen t Programme  Advice /The rural network  EU Nitrates Directive  Regulations to reduce nitrogen emissions  Investments support for biogas production  Energy and carbon dioxide taxes	The Forestry Act Environmental Code Advice and Training



# Swedish energy and CO<sub>2</sub> taxation – a long history that started in 1924

#### **Taxation of energy – two components**

- Energy tax on fuels (1924 petrol; 1937 diesel; 1957 heating oil and coal; 1985 natural gas) and electricity (1951)
- CO<sub>2</sub> tax on fossil fuels (1991)

#### Two levels of CO<sub>2</sub> tax, per ton fossil CO<sub>2</sub>

- High for motor fuels and heating fuels in households and service
- Low for heating fuels in industry raised step by step

### No CO<sub>2</sub> tax on industry covered by EU Emission Trading Scheme The CO<sub>2</sub> tax

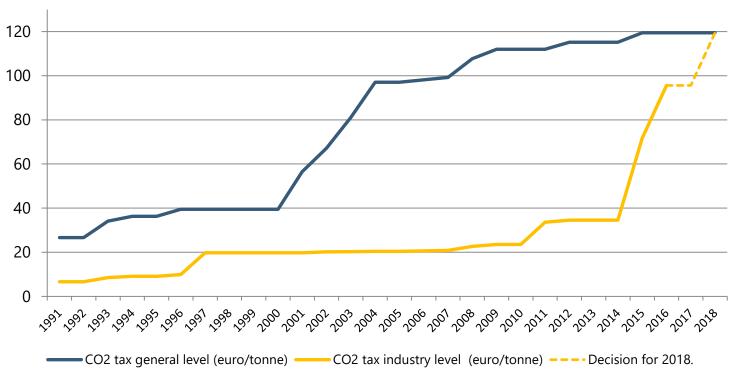
- has since 1991 been the key driver behind Sweden's success in cutting emissions;
- step-by step approach; easy to administer



# Development of the Swedish CO<sub>2</sub> tax general level and industry level

#### CO<sub>2</sub> tax levels

€ per tonne



NOTE: From 2008 industry outside EU Emissions Trading Scheme (EU ETS); Exchange rate 1 €= 9.3754 SEK



### **Concluding remarks**

- Reduced emissions can be combined with long-term economic development
- Emissions have been reduced across our economy following broad implementation of policies
- Sweden will fulfill its share of the EU target for non ETS emissions



### Thank you for your attention!

