## Multilateral Assessment Sweden Progress in achieving targets

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## 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

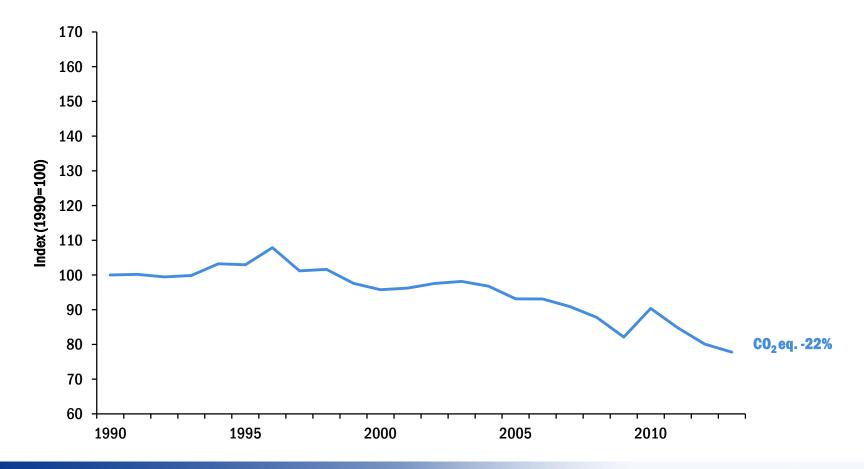


## PUTTING THE OBJECTIVES INTO PRACTICE



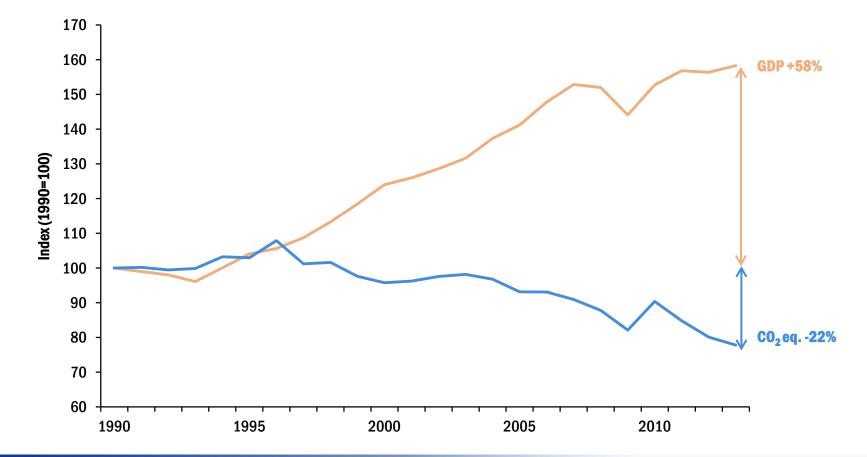


# Reduced emissions can be combined with long-term economic development



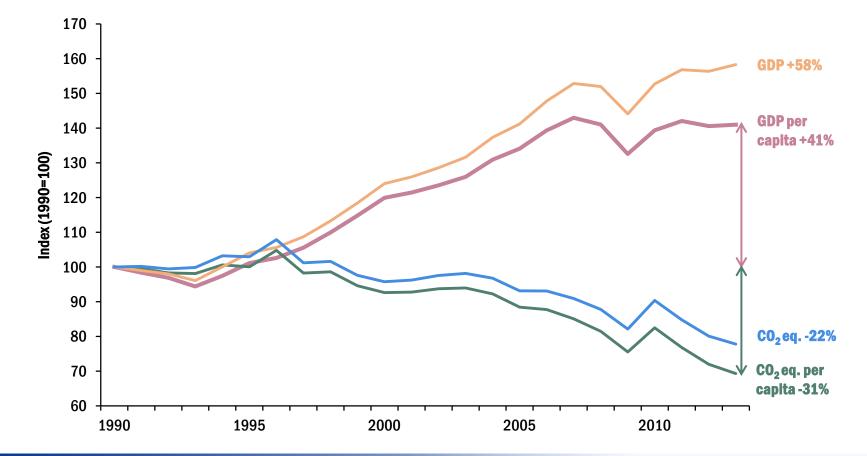
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# Reduced emissions can be combined with long-term economic development



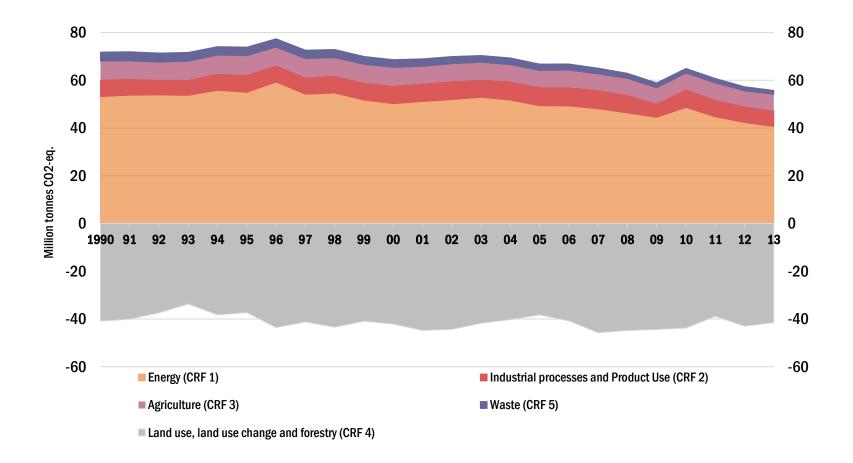
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# Reduced emissions can be combined with long-term economic development



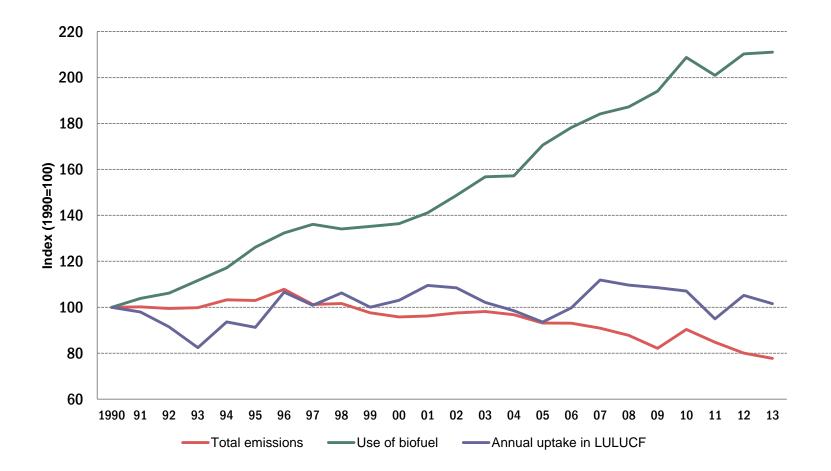
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### **Reduced emissions without compromising carbon sinks**



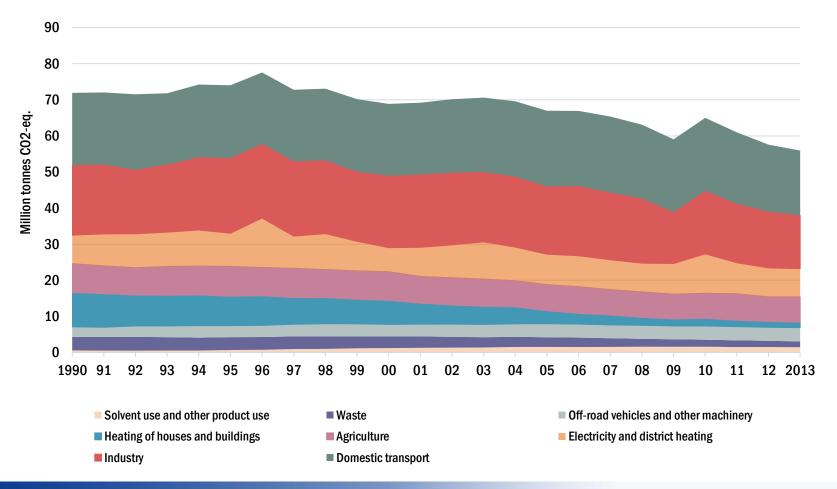


### Switching to bio energy has contributed to emission reductions



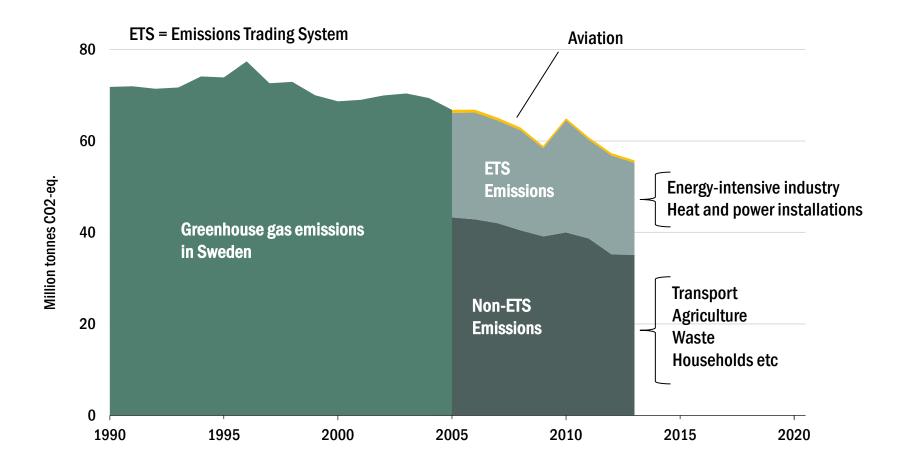
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### **Emissions have been reduced across our economy**



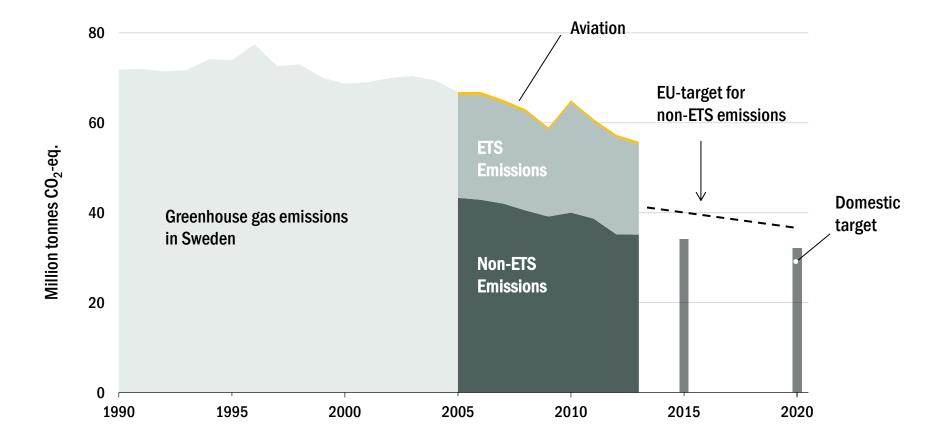


# **37% of Sweden's greenhouse gas emissions were covered by the EU ETS in 2013**





### 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	EU Emissions trading	Energy and carbon dioxide	EU Emissions trading	F-gas regulation	CO <sub>2</sub> standards for new vehicles	Landfill directive	Rural Development Programme	The Forestry Act
Energy and carbon dioxide taxes Local climate investment scheme* Environmental Code Planning and Building Act Communication Research and Development	Energy and carbon dioxide taxes Electricity certificates Special initiatives in support of wind and solar power Tax relief for micro production of renewable Energy	anome taxes Building regulations Technology procurement Ecodesign Directive and energy labelling Energy declarations Climate and energy advice	Energy and carbon dioxide taxes Energy advice and energy surveys in small and medium sized Enterprises	National regulation	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	Landfill tax Ordinance on landfilling of waste with bans on landfilling and on requirements on methane recovery Producer responsibility Municipal waste planning Requirement	Advice / The rural network EU Nitrates Directive Regulations to reduce nitrogen emissions Investments support for biogas production Energy and carbon dioxide taxes	Environmental Code Advice and Training



# Swedish energy and $CO_2$ 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 $CO_2$ tax, per ton fossil $CO_2$

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

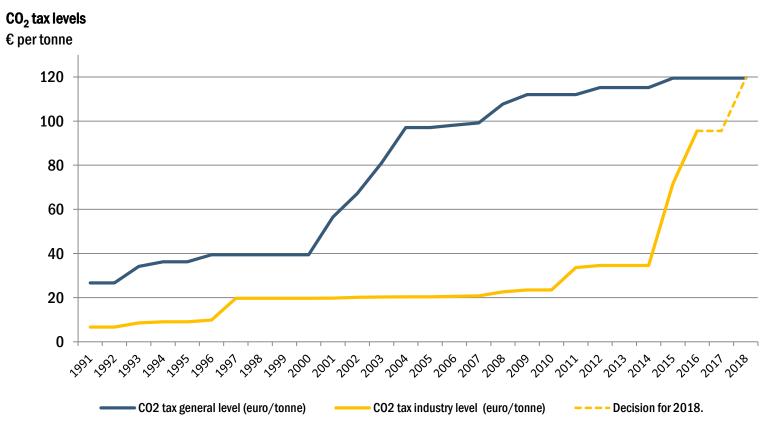
#### No CO<sub>2</sub> tax on industry covered by EU Emission Trading Scheme

#### **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**



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

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## **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!**

