



Commission on Oil Independence

Chairman:

Prime minister **Göran Persson**

Delegates:

Professor **Christian Azar**, Chalmers University of Technology

Lars Andersson, government investigator on bioenergy

Lotta Bångens, Chairman of Sweden's Energy Advisers

Birgitta Johansson-Hedberg, CEO, Lantmännen

Leif Johansson, CEO, AB Volvo

Göran Johnsson, former chairman of the Swedish Metalworkers Union

Christer Segersteen, Chairman of the Federation of Swedish Forest Owners

Lisa Sennerby-Forsse, Secretary-General, Swedish Research Council for
Environment, Agricultural Sciences and Spatial Planning

Staff:

Stefan Edman, biologist, writer

Anders Nylander, architect, expert on energy

How the members were elected

- - Small group
- - Non-political
- - Broad representation from strategic trades
 - Transport
 - Agriculture
 - Forest
 - Energy advisors
 - Research
- - "Heavy" people

The commission was requested
to

**" find the best strategies for reducing
dependence on oil and actual use of oil in
Sweden by the year 2020"**

Working methods

- Internal meetings
- Expert meetings
- Public seminars – four themes
 1. Will oil run out – and, if so, when?
 2. Sweden's green gold – what potential do forestry and agriculture offer for bio energy now and in the future?
 3. How can we reduce our dependence on petrol and other fossil fuels in the transport sector?
 4. How can we reduce our dependence on oil and other fossil fuels for heating and power production?

Five national objectives for reduced oil dependence

1. We will reduce Sweden's climate impact
2. We will secure Sweden's supply of energy in the long term
3. We can become a leading nation in the development of new technology for sustainable use of energy
4. We will strengthen our international economic competitiveness
5. We will use and develop the energy resources from forests and fields, "Sweden's green gold"

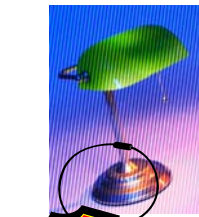
Energy Efficiency

What has that got to do with oil independence?



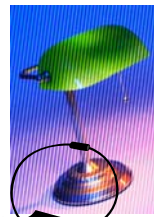
Energy Efficiency is invisible!

- ... but shows in your wallet



20 €

30 €



15 €

70 €

**Increased production of
electricity by
25 TWh**

Use of Oil , 2004, by sector

Sector	Oil Use		Major Purpose of Use		
	% of energy use in that sector	TWh			
Transport	97	95	Motor		
Agriculture, forestry, fisheries	70	7	Tract		ising
Building sector	67	2			
Residential and commercial sector	11	10			
Industry	8	18			
District heating	8	4			
Service sector	6	3			
Power plants	1	3	Power in industry and district heating plants		

Bio energy potential (increase)

År	2020	2050
TWh	46	120

TOTAL 142 TWh

Goals

- Swedish society as a whole should be able to make 20 per cent more efficient use of energy by 2020
- By 2020 in principle no oil should be used for heating in residential and commercial buildings
- Road transport should reduce use of petrol and diesel by 40-50 per cent by 2020
- Industry should reduce its use of oil by 25-40 per cent by 2020

The Five Strategies:

- Radically more effective use of energy by the whole of society
- Historic investment in forest fuels and energy crops
- Electricity for a sustainable supply of energy
- The role of energy gases
- Control instruments at EU level

Effective use of Energy

- **"Energy Efficiency Center"**
- **Swedish society as a whole should improve energy efficiency by 20 per cent by 2020**
This implies an average annual 1.5 per cent increase in energy efficiency

Residential and Commercial Buildings

- New Buildings
 - 75 % low energy houses by 2020
 - Tightened building regulations
 - Energy-related deductions on real estate tax
- Reconstruction
 - Requirements for improvement of energy efficiency

Residential and commercial buildings

- Electricity for heating
- Voluntary agreement for building owners
 - Reduction in taxes when implementing measures (directive on energy performance of buildings)
- Public sector as shining examples
 - Procurement & purchasing
 - Measures (from the directive on energy performance of buildings) mandatory

Energy gases

- The Commission proposes that the Government does not actively commit itself to increased use of natural gas in Sweden in the future
- The Government should support local and regional infrastructures for bio gas

Control instruments at EU level

- The Commission proposes that Sweden contributes to a gradual tightening of the EU emission trading system.
- Objective - total emissions in the trading sector will be 25 per cent lower in 2020 compared with 1990

