

Sementin valmistus



Kalkkikivestä sementiksi resurssitehokkaasti

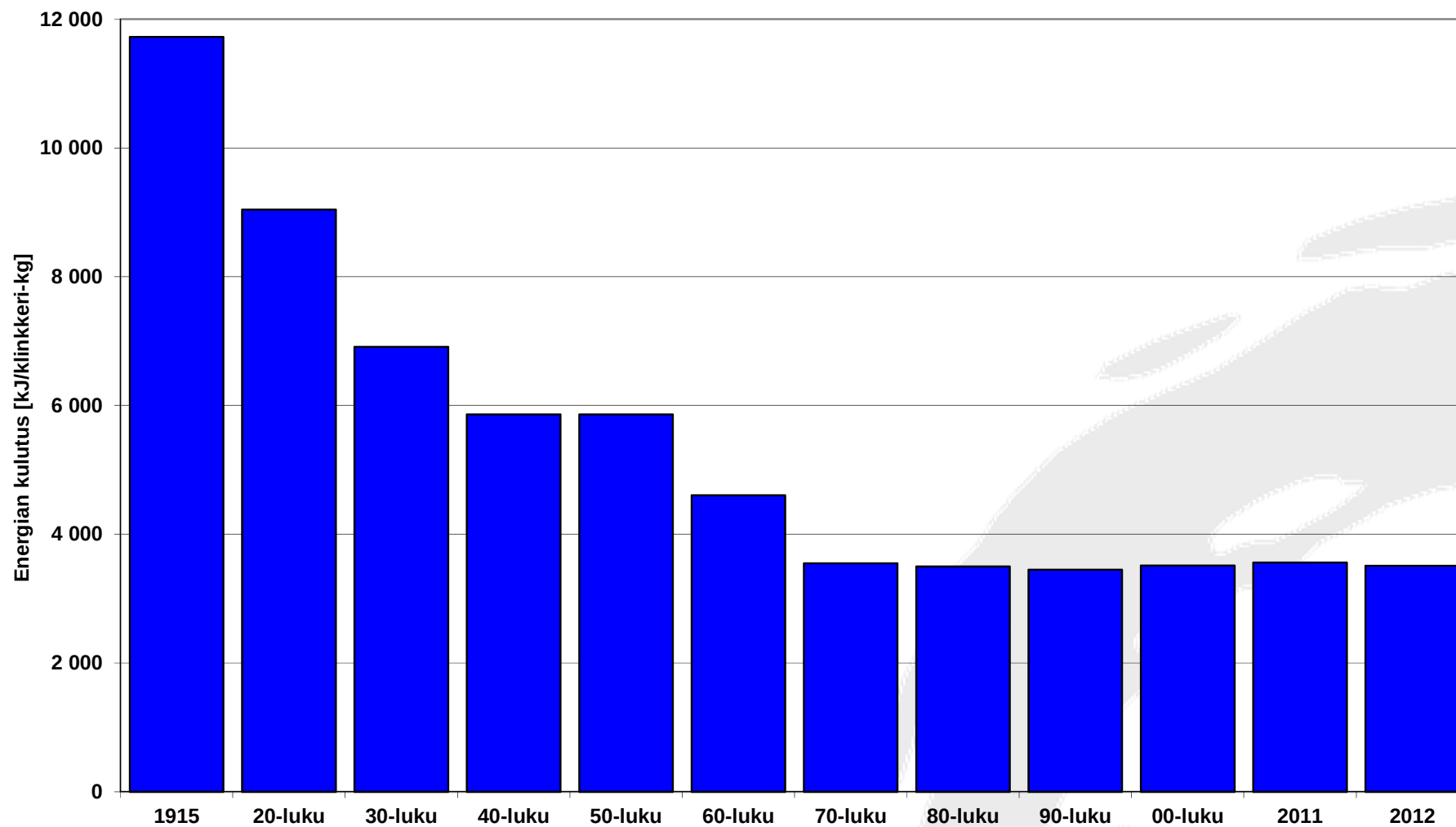
Sementtitehdas vuonna 1931



Sementtitehdas tänään

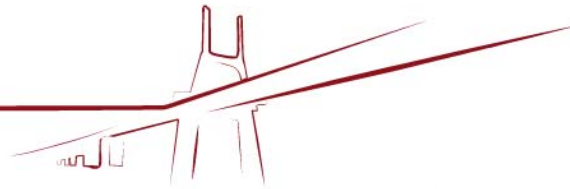


Uunien energiankulutus / Parainen





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Cement Association



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Resource efficiency in the cement industry



Co-processing in the cement industry: using waste as a resource

The unique benefits of co-processing should be recognised in a revised EU waste treatment hierarchy to ensure that the selection of this perfect waste recovery option can be prioritised and encouraged.

[Read more](#)



Alternative fuels

In 2011, the European cement industry used an energy equivalent of about 18Mt of coal, a non renewable fossil fuel, for the production of 196Mt of cement. Alternative fuels constituted 34% of this across Europe, saving about 6Mt of coal and reducing the need for mining a non renewable resource

[Read more](#)



Alternative raw materials

In 2006 about 5% of the raw materials used in the production of clinker consisted of alternative raw materials, totalling about 14.5Mt/year.

[Read more](#)



Substitution of clinker with alternative constituents

The main constituent of cement is clinker. Depending on availability, part of the clinker can be replaced with alternative constituents.

[Read more](#)

Latest news

CEMBUREAU News

September 2013 Eurobrief available!

Co-processing - the perfect waste recovery option!

CEMBUREAU responds to sustainable buildings consultation!

European cement industry presents five routes to a low carbon future!

CEMBUREAU responds to waste management targets consultation

CEMBUREAU responds to Carbon Leakage Consultation

CEMBUREAU response: Occupational safety and health consultation

CEMBUREAU submits views on 'A 2030 framework for climate and energy policies' Green Paper.

CEMBUREAU responds to Consultative Communication on Carbon Capture & Storage

CEMBUREAU response: 2015 International Climate Change Agreement Consultation

Related News

Joint position paper on possible eco-design for custom designed industrial furnaces and kilns
Industrial Emissions Alliance



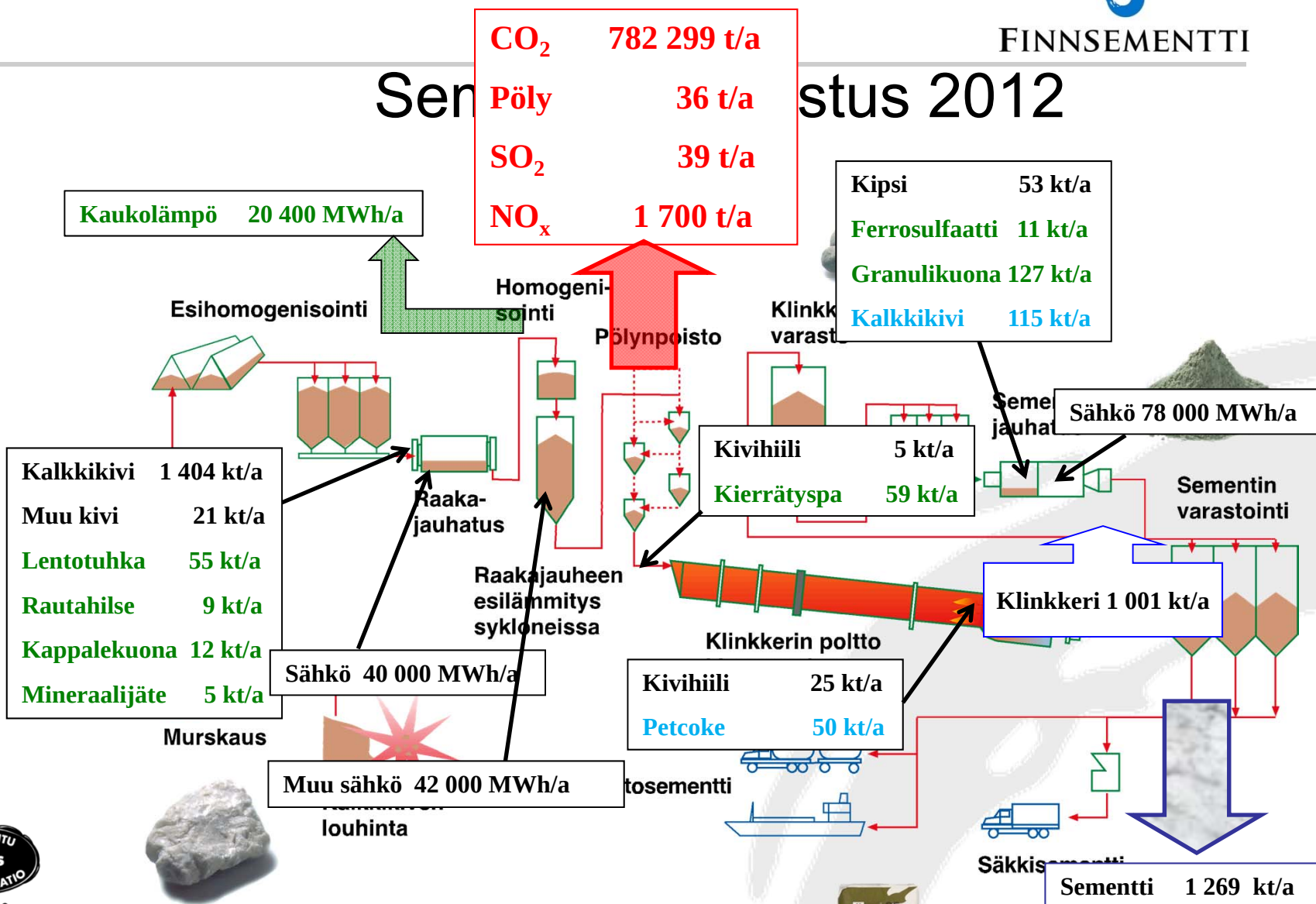
FINNSEMENTTI

<http://www.cembureau.eu/topics/resource-efficiency-cement-industry>



FINNSEMENTTI

Sementin tuotantoprosessi 2012



Tehokkuusmittarit Finnsementissä

Uunin energiankulutus

- Energiankulutus 3 527 kJ/kg => 3 500 kJ/kg

Vaihtoehtoiset polttoaineet

- Energiasta kierrätyspolttoaineista 30,8 % => 54 %

Sähkön kulutus

- Sähkön kulutus 121 kWh/t => 116 kWh/t

Klinkkerin osuus sideaineissa

- Klinkkerikerroin 75,8 % => 71,0 %

THE ROLE OF CEMENT IN THE 2050 LOW CARBON ECONOMY



FOREWORD ABOUT CEMENT ▾ OUR EMISSIONS ▾ FIVE PARALLEL ROUTES ▾ TOWARDS THE FUTURE ANNEXES ▾

OVERVIEW

Mankind's invention of concrete has been a key event in evolution. Its simplicity, durability, strength, affordability and infinite ability to be moulded provide the solid foundations and essential built environment for society. Some call it 'liquid stone' allowing architects, community planners and homebuilders to realise their dreams, including the creation of spaces of beauty and light. But it goes beyond that. Concrete works equally well underwater, underground, in Arctic conditions and on the top floors of of skyscrapers. It has high fire resistance. It absorbs and releases heat, acting as a natural air conditioner due to this 'thermal inertia'. The result of all this is that concrete is the third most used substance in the world after air and water, a staple of modern life and society. [READ MORE](#)

5 PARALLEL ROUTES to reduce Emissions



Resource efficiency

Use of alternative fuels like biomass or waste materials has an immediate impact on the industry's carbon profile.



Energy efficiency

Replacing older plants with more modern and efficient technologies and continually modernising existing plants will result in improved electrical performance.



Carbon sequestration and reuse

One long-term solution is carbon capture, whereby CO₂ is captured at the source and then re-used or stored.



Product efficiency

After cement manufacturing, several techniques and processes are used that further improve the environmental performance of concrete.



Downstream

The sector looks beyond the factory gates and carries out research and product development to improve the environmental performance of concrete and how to reuse or recycle concrete.

DOWNLOADS

The role of CEMENT in the 2050 LOW CARBON ECONOMY

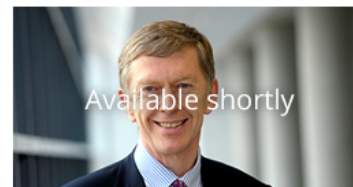
> [Cembureau - Executive summary.pdf](#)

> [Cembureau - Full report.pdf](#)

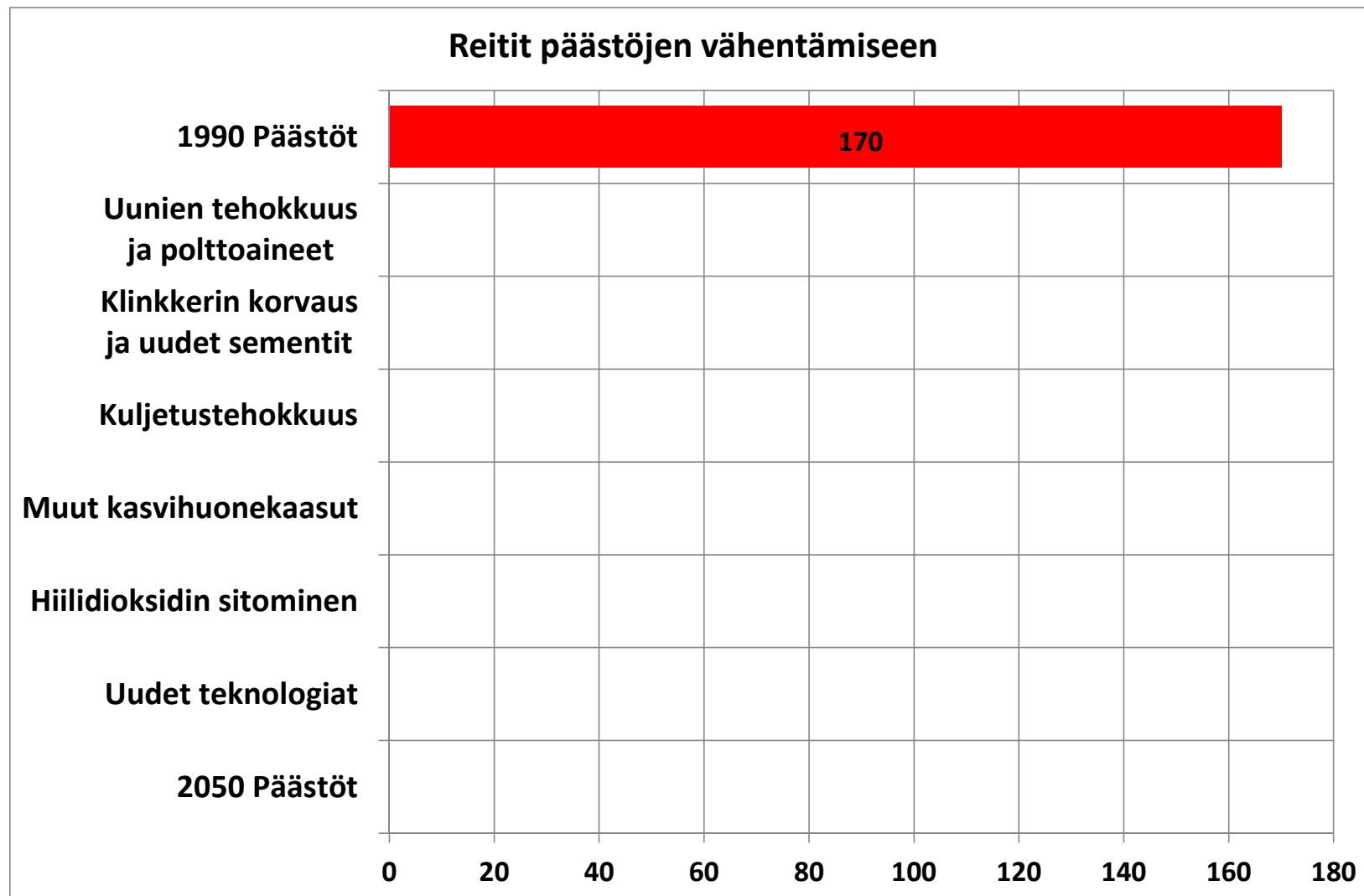
VIDEO



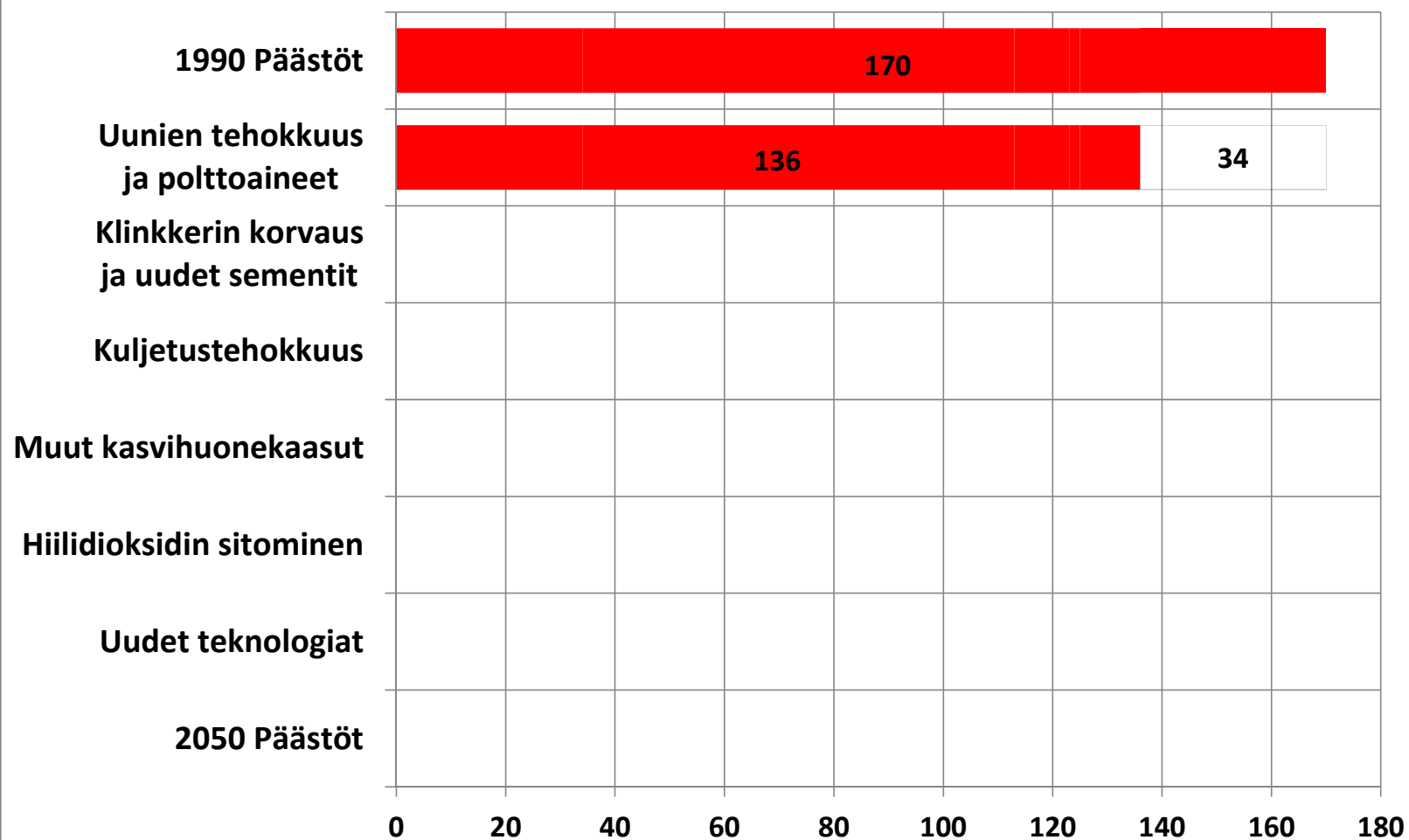
Message of the Chief Executive
Mr. Koen Coppenhelle



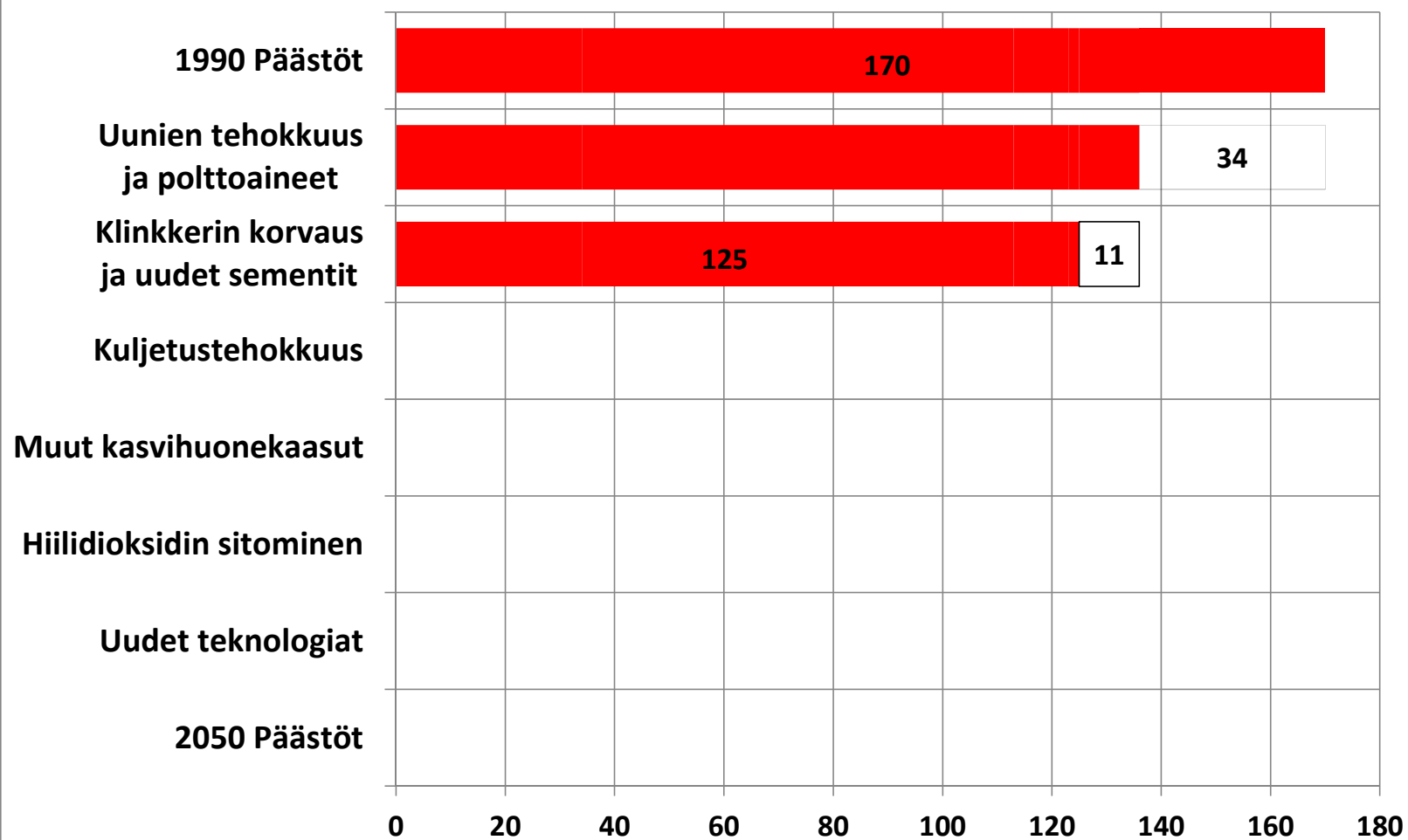
Message of the President
Mr. Peter Hoddinott



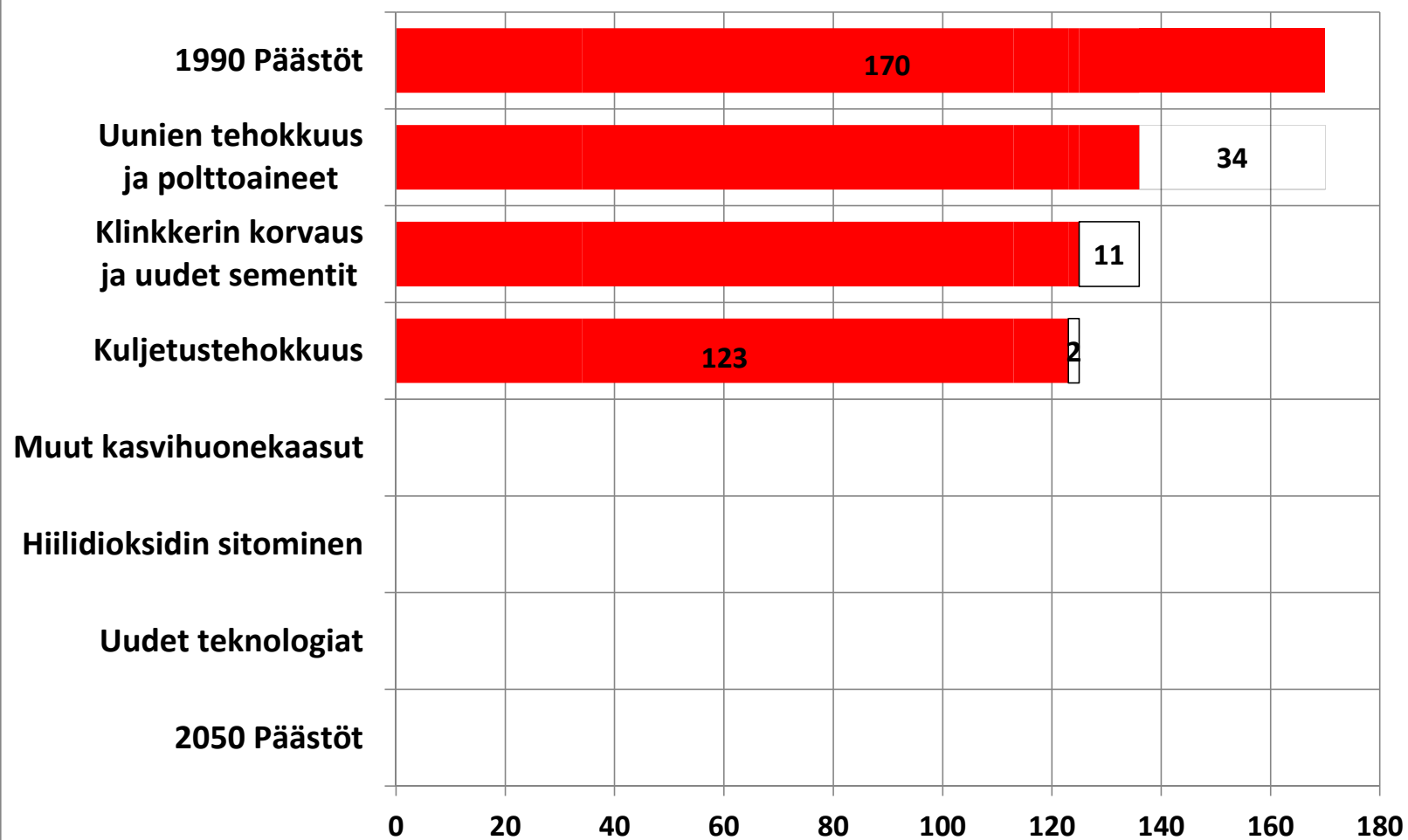
Reitit päästöjen vähentämiseen

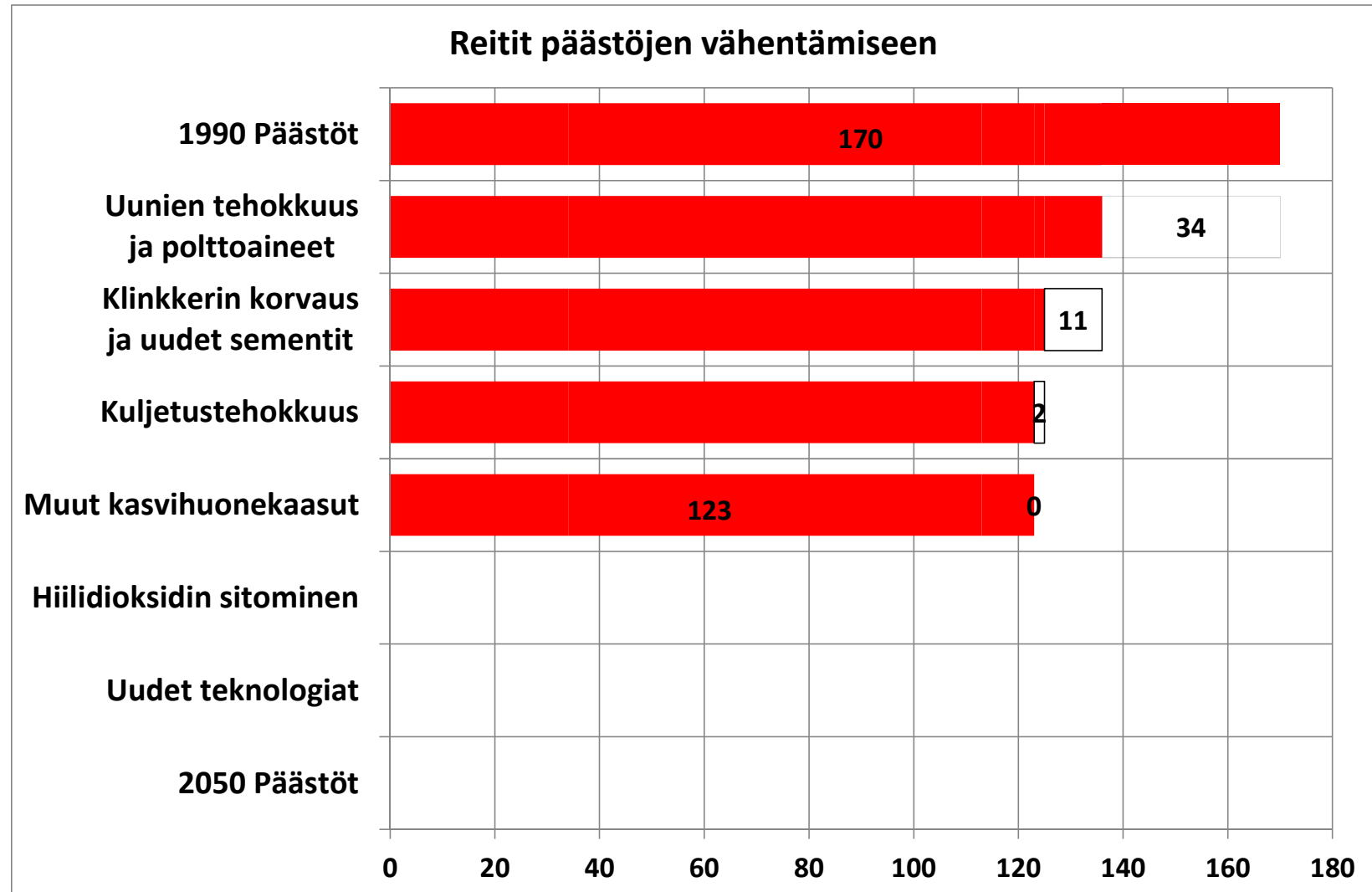


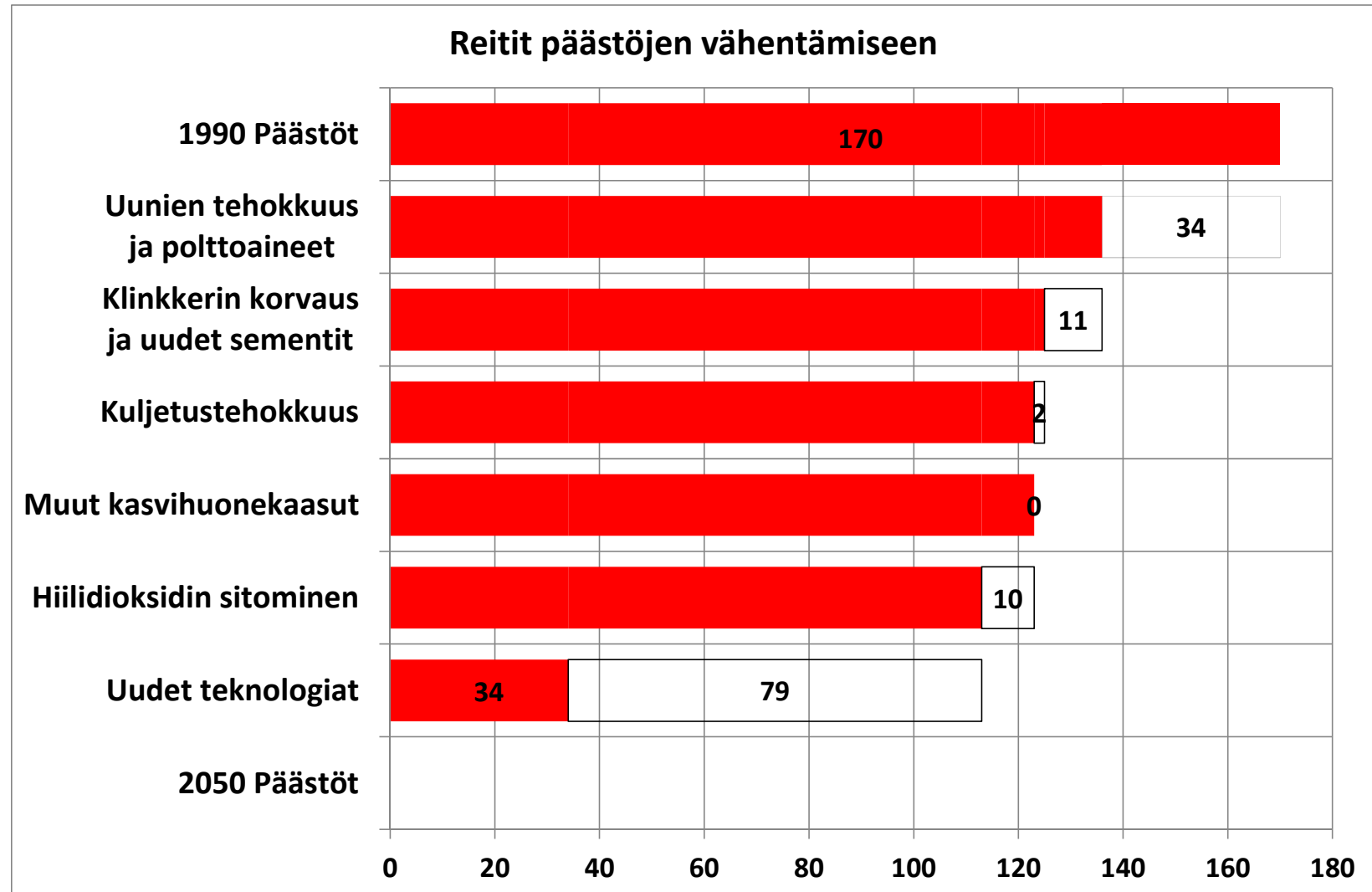
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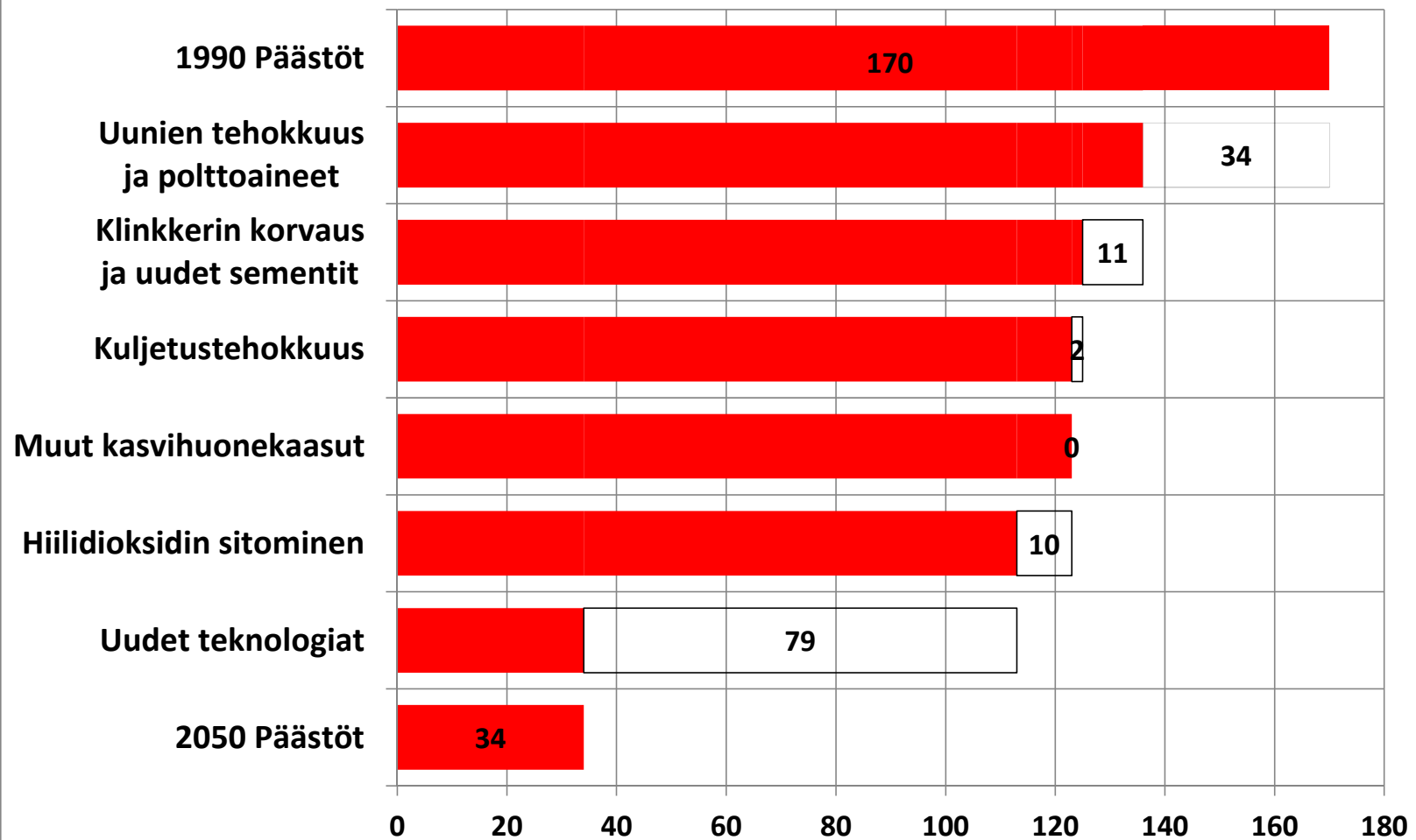
Reitit päästöjen vähentämiseen







Reitit päästöjen vähentämiseen



Saavutuksia 2012 v. 2005

Lappeenrannan Uuni 7

- Energian kulutus väheni 15 %
- CO₂-päästö pieneni 55 000 tonnia

Kierrätyspolttoaineet

- Osuus kasvoi 30 %
- CO₂-päästö pieneni 56 000 tonnia

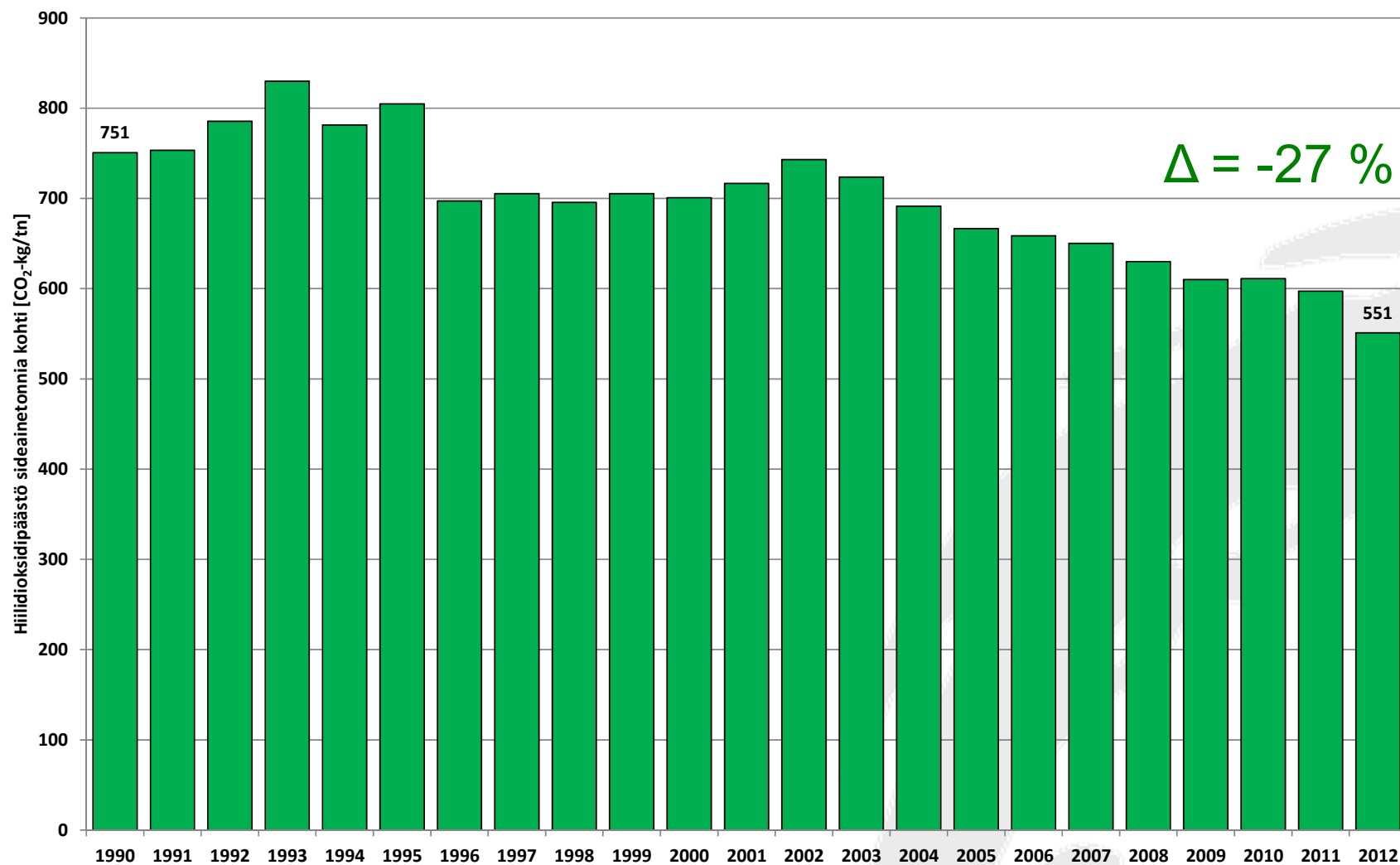
Plussementti

- Osuus sementtituotannosta > 50 %
- CO₂-päästö pieneni 43 000 tonnia

CO₂-päästöjen vähennys 154 000 tonnia



Finnsementin hiilidioksidipäästöt sideainetonna kohti



Rakentamisen materiaalitehokkuuden edistämishjelma

Uudisrakentaminen

- Elinkaarijoustavuus ja materiaalitehokkuus

Kiinteistönpito ja korjaaminen

- Säästävä korjaaminen ja rakennusjätteen kierrätys

Materiaalitehokkuusosaaminen

- Koulutus ja yhteistyö

Ohjaus, tilastointi ja raportointi

- Verkkopohjainen raportointijärjestelmä

Jätteen vastaanotto ja hyödyntämispalvelut

- Sähköinen rekisteri vastaanottopisteistä

Uudelleenkäyttö ja kierrätys

- Sähköinen kauppa, laadunvarmistus ja lainsäädäntö