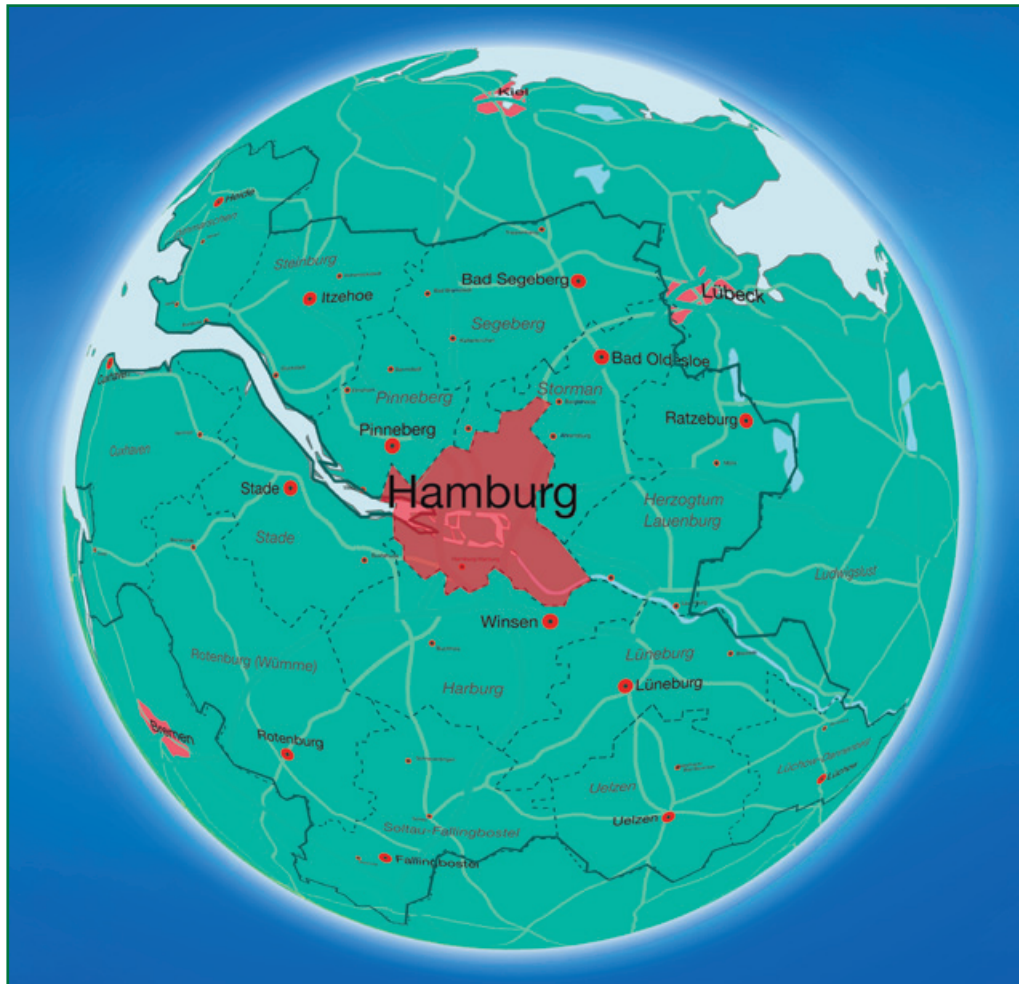


1 WHO WE ARE



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CITY OF HAMBURG

1.8 million inhabitants

750 square kilometres

METROPOLITAN REGION OF HAMBURG

4.3 million inhabitants

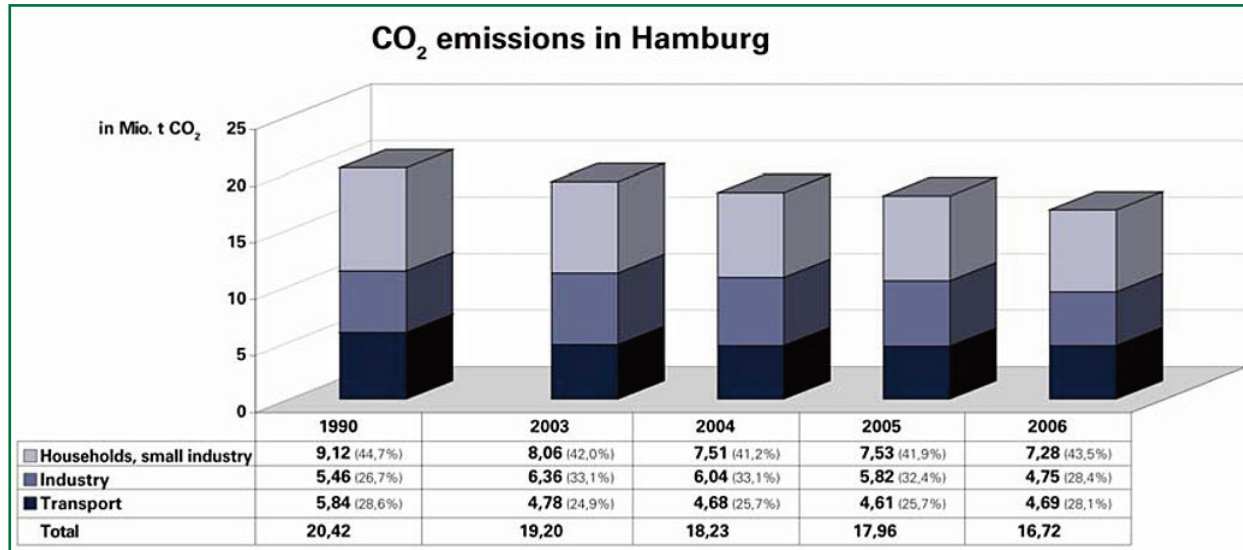
20,000 square kilometres

Hamburg considers the cooperation with the metropolitan region and in international networks as an indispensable part of its Climate Action Policy.

2 CO₂ EMISSIONS IN HAMBURG



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Acceleration in CO₂ reduction:

from 1990 to 2007 = 14% (0.8% p.a.)

from 2003 to 2007 = 8% (1.6% p.a.)

Longer-term trends:

Decreased emissions from individual transport

Increased emissions from aviation

Decreased oil consumption for heating

(despite housing space increase by 13% since 1990)

Emissions 2006:

Industry 29%

Transport 27 %

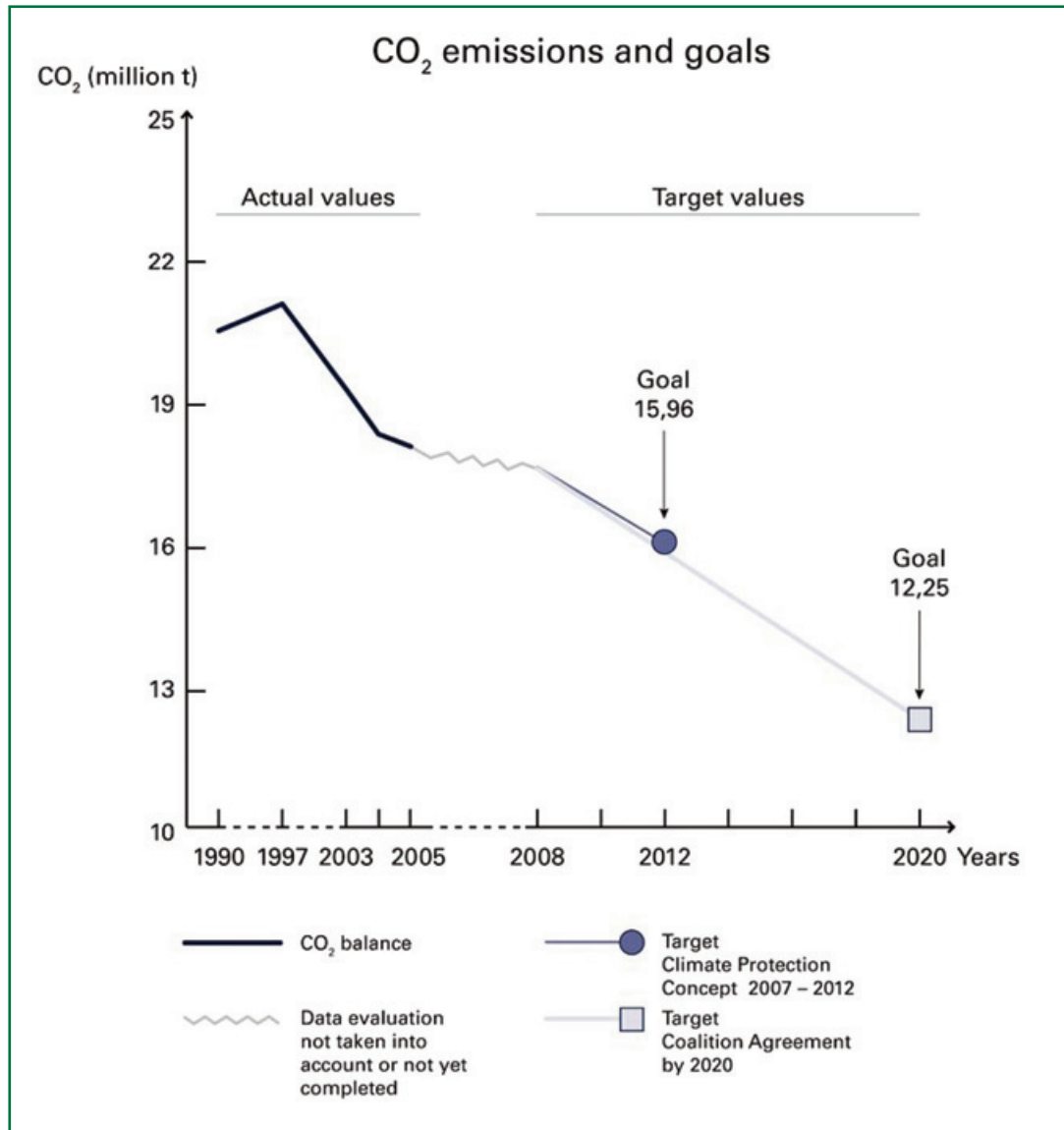
Private houses 23 %

Small/medium enterprises 20 %

3 REDUCTION GOALS



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Reduction goals compared with 1990:

20% reduction until 2012

40% reduction until 2020

80% reduction until 2050

Key aspects are

- energy substitution by increased use of renewables
- energy reduction by improved efficiency
- energy reduction by strict rules for buildings modernisation, including existing buildings and effective limits to energy consumption in products, especially in vehicles.

4 SUSTAINABLE ENERGY ACTION PLAN IN HAMBURG



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Climate Action in Hamburg

Framework Conditions – Fields of Action – Tools
Update 2008/2009 for Climate Action Policy 2007-2012



Hamburg Energy Action Plan (SEAP)

Established: 2007

Volume: 25 Mio € each year until 2012

Implementation: Coordination Centre for
Climate Issues (est. 2007)

Control: Annual reporting

Key instruments

- Subsidy programme for thermal insulation
- Subsidy programme for photovoltaic installations
- Subsidy programme for thermal heating
- Subsidy programme for enterprises to improve energy efficiency
- Stakeholder's commitment to reduce 500.000 tons of CO₂ p.a.
- Planning of a city-owned energy supply company based on renewable energies

5 IMPLEMENTATION AND ADJUSTMENT OF SEAP



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Sustainable Energy Action Plan

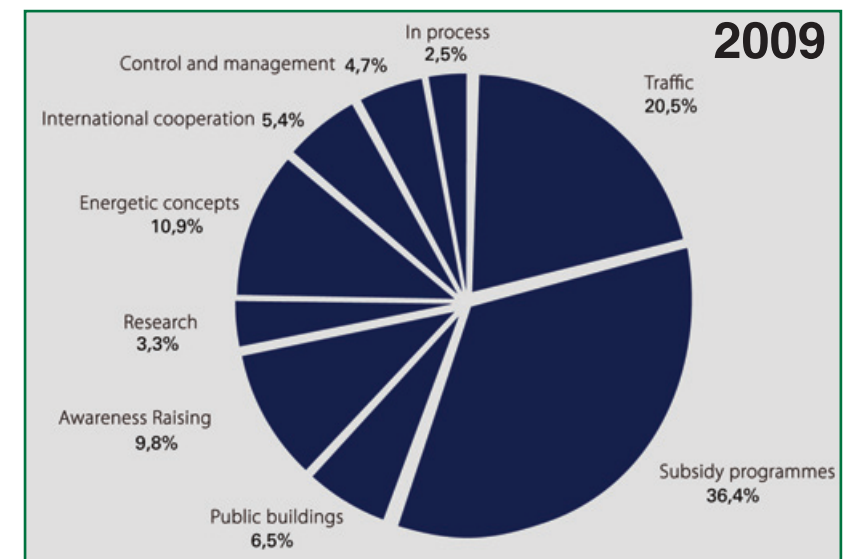
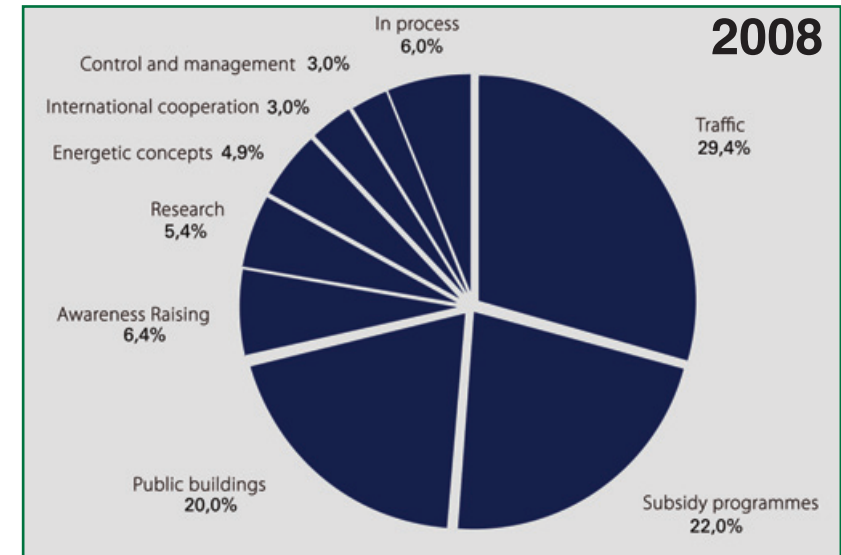
August 2007: **206 concrete measures decided**

10 Sectors

01. Research
02. Energetic concepts
03. Public administration as forerunner
04. Buildings (in private property)
05. Mobility
06. Trade and equipment technology
07. Adaptation
08. Awareness raising
09. National and international cooperation
10. Legislation

November 2008 - Evaluation of 206 measures:
50% implemented, 50% being planned.

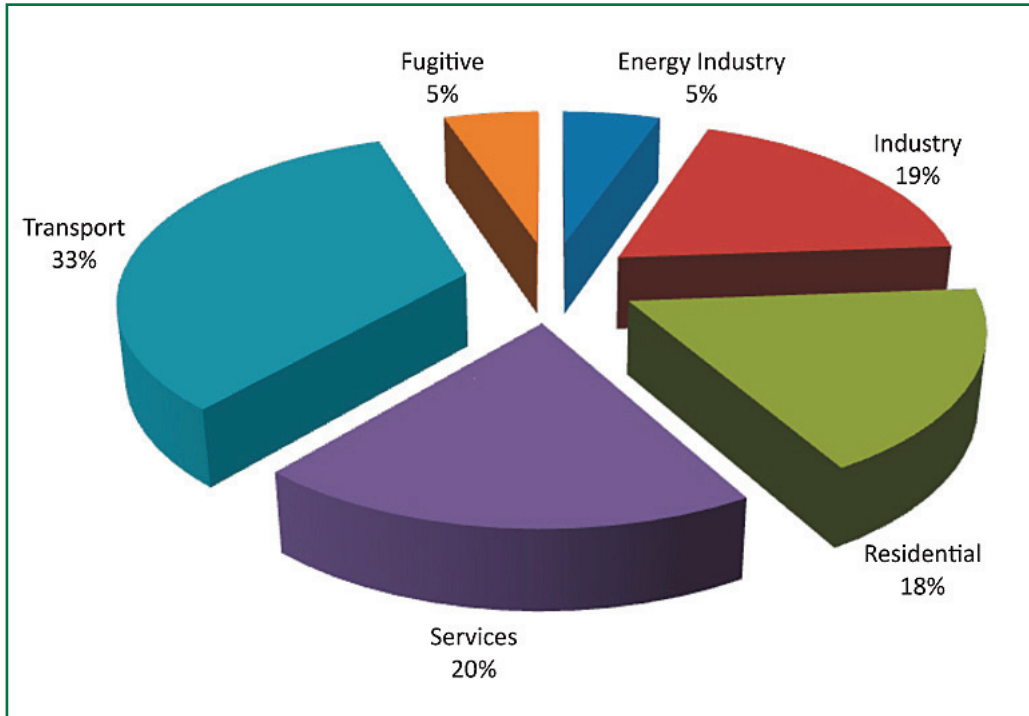
New measures in 2008/09: 84



6 METROPOLITAN COOPERATION FOR A BETTER SEAP



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Hamburg Metropolitan Region: Emissions from energy sources' combustion, distribution, transformation & extraction (GRIP Hamburg Metropolitan Region Inventory 2009)

Metropolitan CO2 inventory

Some important success factors cannot be defined at the local level. In many cases there is a need for cooperation with the municipalities and counties of the metropolitan region.

Therefore a working group on “Climate Action in Hamburg Metropolitan Region”, coordinated by the Hamburg Coordination Centre for Climate Issues, is setting up the framework for a Climate Action Policy for the metropolitan region as part of the Hamburg SEAP..

An important step was the **regional CO2 inventory** compiled in 2009 as part of project **EUCO2 80/50** (see chart 9-11)

7 LOOKING FOR SEAP IMPROVEMENT OUTSIDE THE CITY



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The climate doesn't care where we reduce greenhouse gas emissions. If we focus solely on our own local options, we can fail to spot some obvious opportunities. The cities need renewable energy. But where to take from?

Hamburg has very few places for **eolic power**. In the neighbouring districts, wind efficiency is bigger and land is cheaper. With the same investment you obtain a greater mitigation effect.

The roofs of agricultural buildings provide large surfaces that are excellently suited to **photovoltaic** panels. And the long-term contracts necessary for such projects are often easier achieved with agricultural businesses than with trade and industry.

Biomass is easier to find and to convert into electric energy in rural areas.





Climate Networking

Hamburg is member of Covenant of Mayors, METREX, ICLEI, Climate Alliance and Connected Urban Development.

Hamburg is coordinator of the EUCO2 80/50 project which aims to develop mitigation strategies in **18 european metropolitan areas** in a three-step-approach based on GRIP, which is at the same time an inventory tool, a computer simulation programme and a decision finding process:

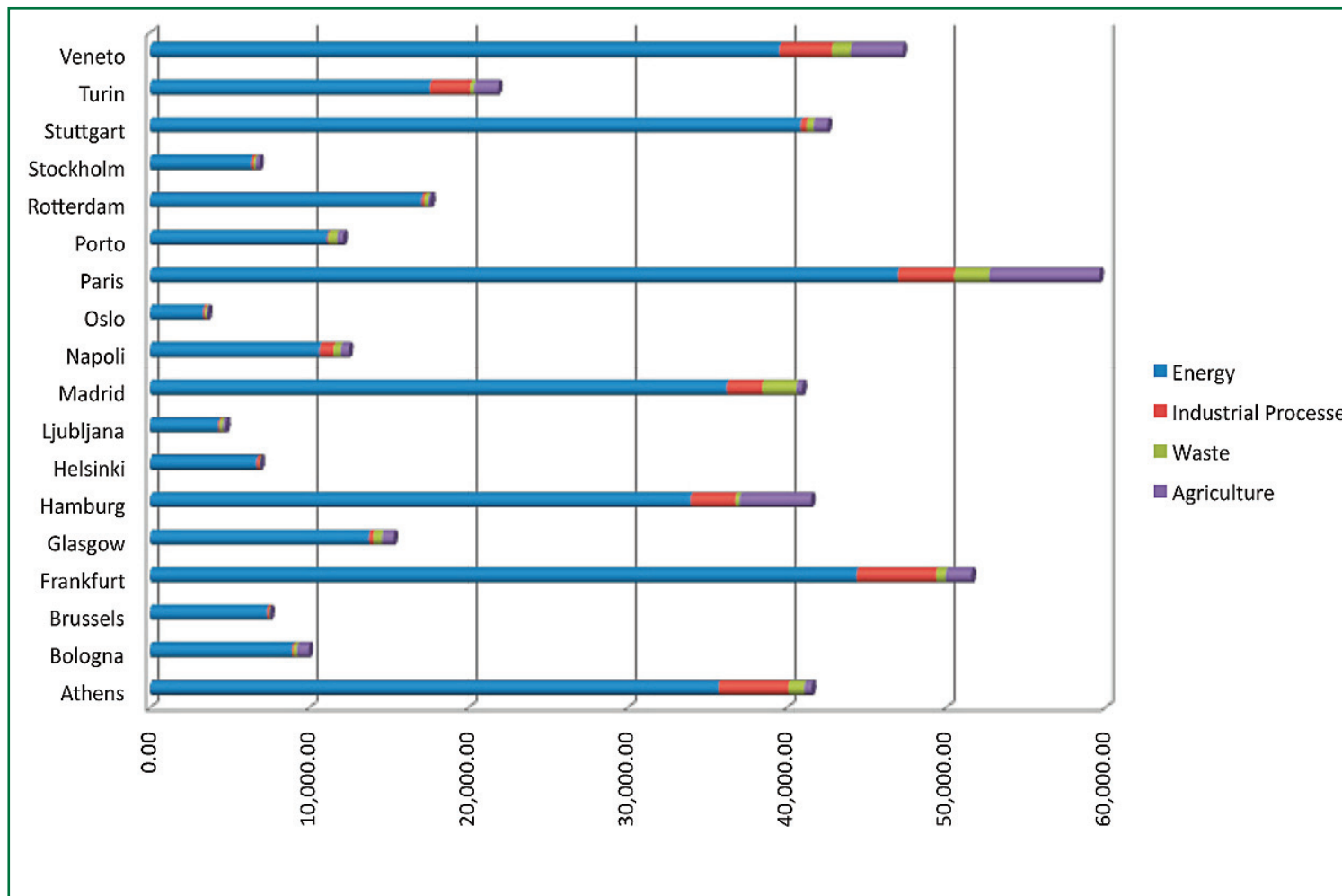
- 1 CO2 inventories (done)
- 2 Scenario/Strategy workshops
- 3 Dissemination and transfer



9 CONCERTED EFFORTS INSPIRE YOUR SEAP



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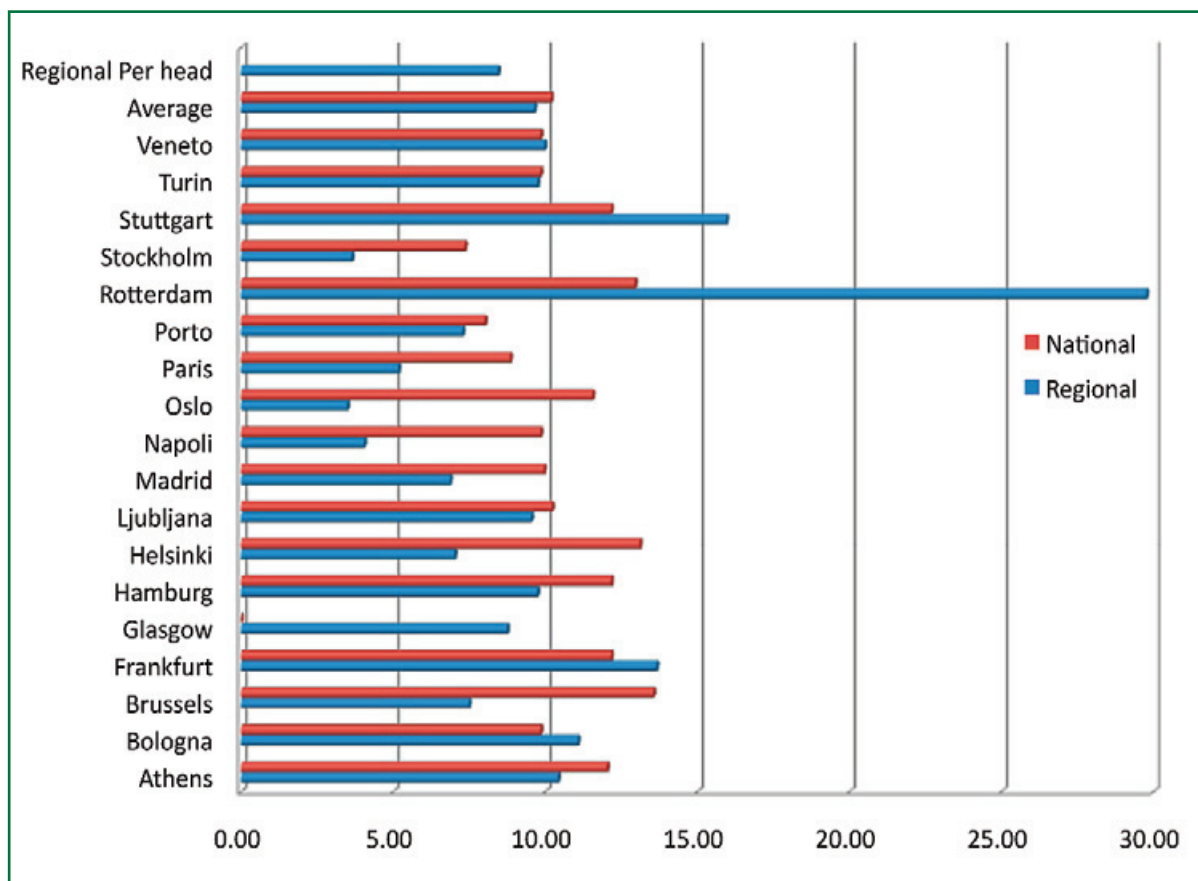
The European comparison shows that energy is the crucial sector for mitigation.

Overview: Relative contribution of the four key emissions sectors to overall greenhouse gases emissions (from: 2009 GRIP inventories)

10 DO NOT COMPARE - LEARN



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Emissions per capita (tCO₂e)
(from: 2009 GRIP inventories)

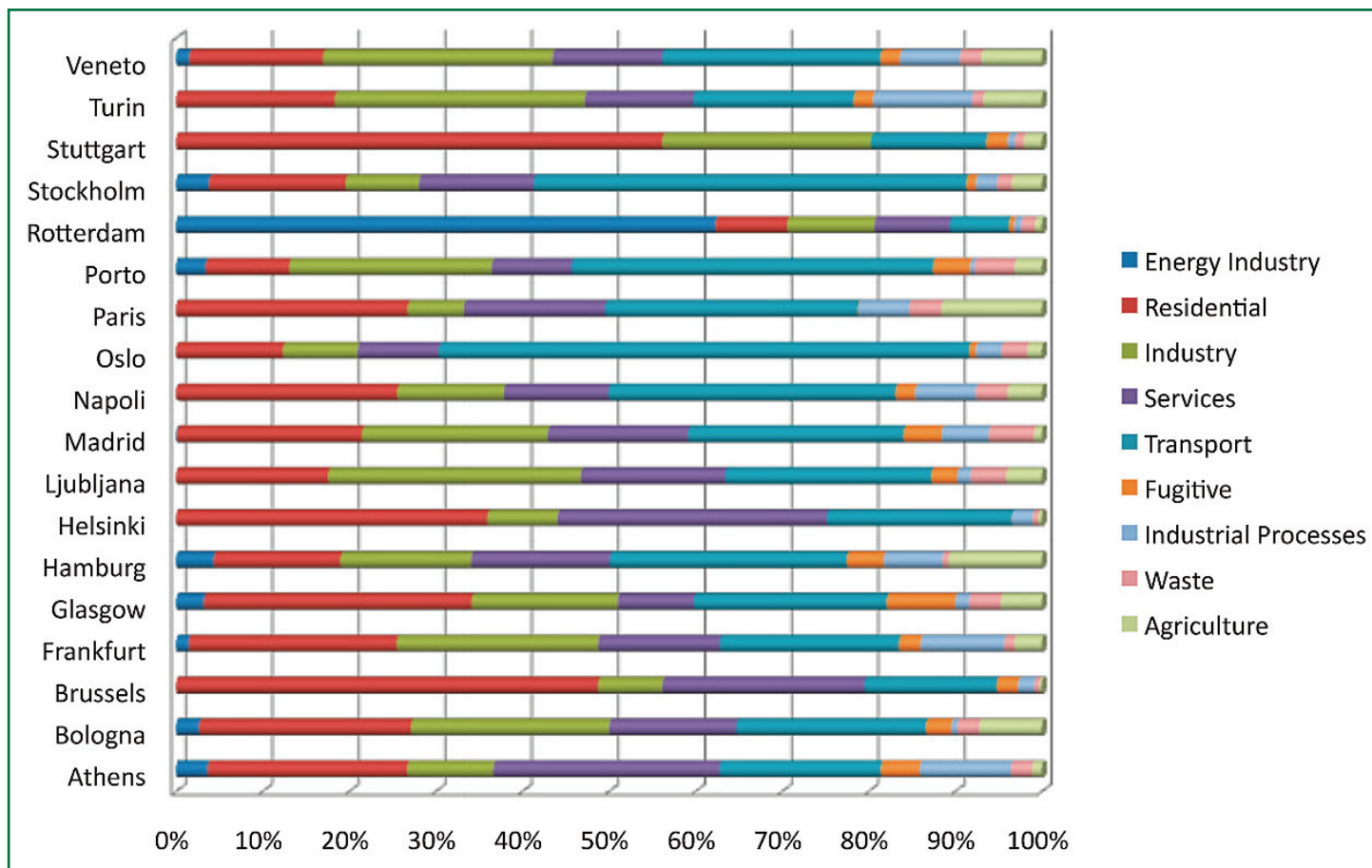
The comparison of the emissions per capita should not be used as a benchmarking. The geographical, economic and historic backgrounds are very different.

But you can study regions in identical climatic zones with an equal degree of industrialisation and a comparable size as regards the reasons for differences or for congruences - and thereby learn from each other.

11 MITIGATE FIRST TRANSPORT AND PRIVATE HOUSES



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The emissions sources vary in proportion in the different regions.

Everywhere however, a promising mitigation impact may be achieved in the transport and the residential sectors, followed by services and the industrial sector.

The study as a whole is available at www.euco2.org

Contribution of each emissions source to overall emissions in each region (from: 2009 GRIP inventories)



We have an ambitious climate action plan (SEAP) with a annual funding of 25 million €.

We do everything we can do in our own authority in our city for energy saving, substitution of fossile energy and using energy more efficiently.

We cooperate with our neighbours in the Metropolitan Region, since in the interest of climate protection we have to find a common programme and aim to disseminate best practice solutions.

We are active in international networks and projects because climate policy needs mutual learning and the effects are greater when many partners cooperate.

The EUCO2 80/50 project is a crucial initiative to improve our SEAP.

13 CONTACT



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**Free and Hanseatic City of Hamburg
Ministry of Urban Development and Environment
Department of Climate Protection
Stadthausbrücke 8
D-20355 Hamburg**

**Tel: 0049 40 42840 2536
rainer.scheppelmann@hamburg.de**