

1 WHO WE ARE



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CITY OF HAMBURG

1.7 million inhabitants
750 square kilometres

METROPOLITAN REGION OF HAMBURG

4.3 million inhabitants
20.000 square kilometres

2 CLIMATE POLICY NEEDS A PHILOSOPHY



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Hamburg Climate Policy

Think global

(to understand the problem)

Analyze your status quo

(to find your own way)

Act local

(as far as you can)

Ensure national legislation

(you need it)

Look for international contacts

(you learn a lot)

Cooperate with your neighbours

(you need them)

3 THINK GLOBAL - to understand the problem



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Inevitable Climate Change Effects in Northern Germany

Raising sea level and higher tides
(between 40cm and 80 cm until 2100)

Higher temperatures
(between 1,5 and 2 degrees until 2050)

More rain in winter
(between 15% and 30% more)

Less rain in summer
(between 15% and 30% more)

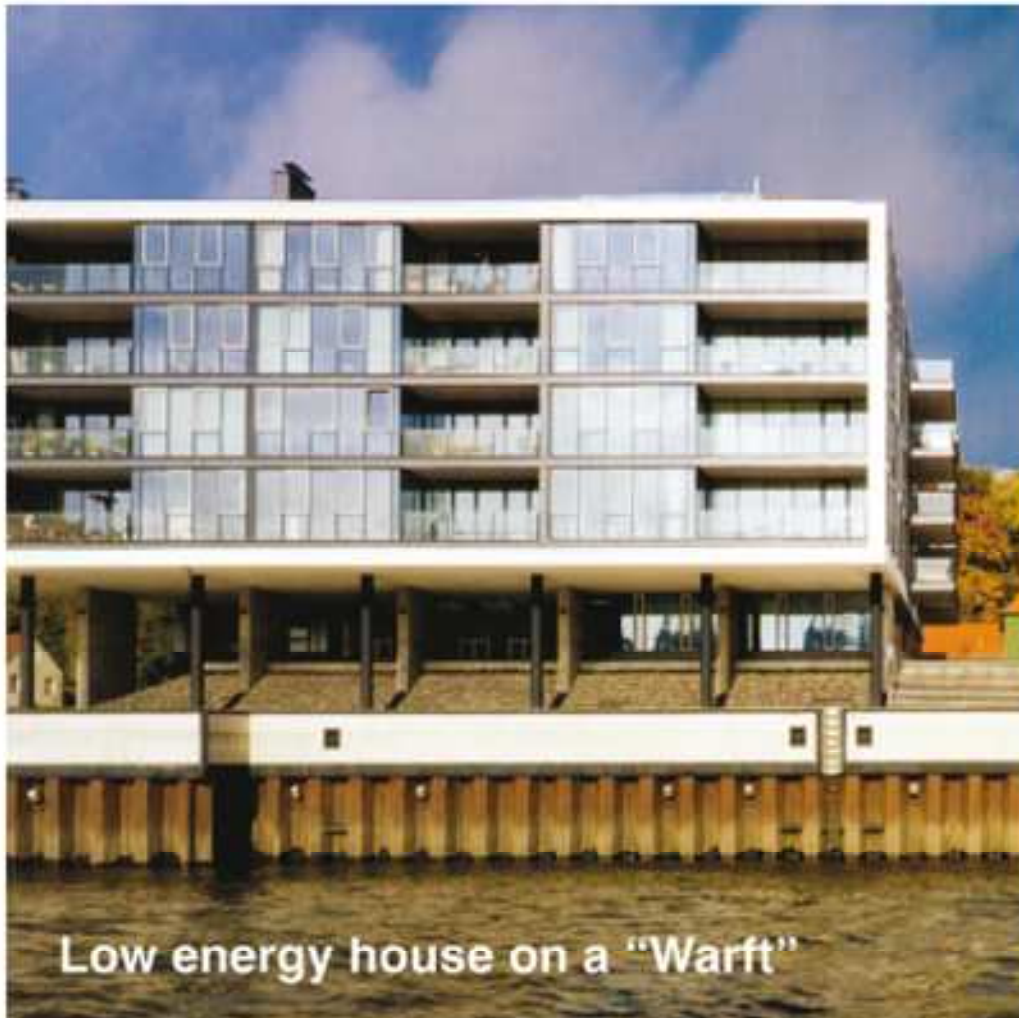
Dry periods in summer
(problems for agriculture and drinking water)



4 UNDERSTAND THE PROBLEM - define what you need



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Low energy house on a "Warft"

What we need:

Adaptation

We have to manage the inevitable consequences of climate change
(Flood defenses, water management, renaturation, afforestation)

Mitigation

We have to limit climate change through

- substitution of fossil energy
- using energy more efficiently
 - energy saving

5 ANALYZE YOUR STATUS QUO - to find your own way



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Northern Europe's logistical hub.

Europe's second largest port.

Number three in aviation industry.

Biggest contiguous industrial region in Europe, with refineries and metal working and petrochemical plants.

Contradictory Hamburg

Public transport = one of the closest knit in the whole world.

Europe's greenest metropolis: parks, green spaces and nature reserves = 20% of its total area.

Largest fruit-growing area in Europe in proximity to the industrial plants.

Hamburg has a good starting point in its efforts to tackle climate change, but also faces major challenges.

The region's efficient public transport system and powerful green lungs are plus points.

Conversely, answering to and significantly reducing the high energy requirements of the industrial and logistics sectors is an ambitious task.

6 ACT LOCAL - as far as you can



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Hamburg CO₂-Reduction from 1990 to 2007 = 14%, from 2003 to 2007=8% (=acceleration)

The Hamburg Climate Protection Programme

Established: 2007

Volume: 25 Mio € each year

Goals: 40% reduction until 2020,
80% reduction until 2050

Concrete Measures

- Public administration as forerunner in mitigation
- 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.
- Financing of pilot projects in water management, new energies, awareness raising, research
- Planning a city-owned energy supply company based on renewable energies



7 ENSURE NATIONAL LEGISLATION - you need it



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National laws support you...

1991

Hamburg starts the
1.000 roofs programme

1998

Federal government starts the
100.000 roofs programme

2001

The Renewable Energy Law brings
Germany into a leading position in eolic
power, photovoltaic installations
and thermal heating

...or slow you down

2007

Hamburg's initiative to make thermal
insulation obligatory for existing
buildings is not approved by the
national parliament. Hamburg
can prescribe thermal insulation
only for new buildings.

2008

Hamburg has to approve a new
coal-fired power station because
national laws don't allow regional
authorities to take into consideration
carbon emissions in the
approval process

8 LOOK FOR INTERNATIONAL CONTACTS - you learn a lot



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Climate Networking

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

Hamburg is Lead Partner 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, a computer simulation programme:

- CO2 Assessment
- Scenario workshops
- Strategy workshops



9 COOPERATE WITH YOUR NEIGHBOURS - you need them



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**Both in mitigation and adaptation
you need your neighbours**

**The climate doesn't mind where we
reduce greenhouse gas emissions.**

**If we focus solely on our own
local options, we can fail to spot
some obvious opportunities.**

**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.**

10 COOPERATE WITH YOUR NEIGHBOURS - Mitigation



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Photovoltaic plants

The roofs of agricultural buildings provide large surfaces that are very well suited to photovoltaic panels.

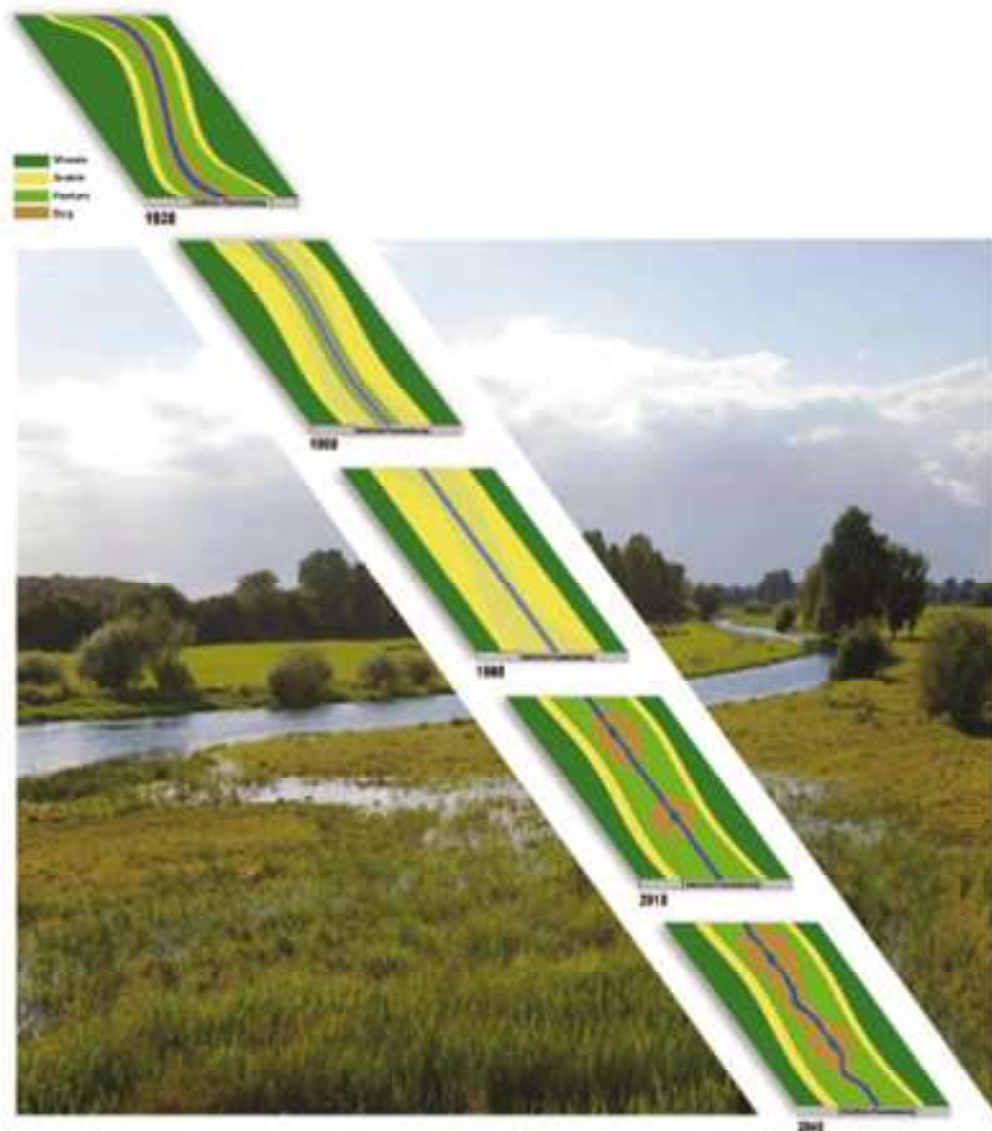
And the long-term contracts necessary for such projects are usually easier to agree with agricultural businesses than with trade and industry.

So look for solutions outside your city, too.

11 COOPERATE WITH YOUR NEIGHBOURS - Adaptation



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Rivers need place

To cope with heavy rainfalls and dry periods, we need to restore flood plains.

Agriculture has to abandon fluvial plains. Then moorland and wetland areas can be established that are able to take up water in winter and release it again in dry periods.

We avoid inundations in the cities.

This is also important for the provision of drinking water and for agriculture.

We have to cooperate and share the burden with our neighbours.



Hamburg Climate Policy

Think global

(to understand the effects of climate change in your region)

Analyze your status quo

(to find answers for your specific situation)

Act local

(do everything, but also think in wider horizons)

Ensure national legislation

(this is crucial for success)

Look for international contacts

(they open up your mind)

Cooperate with your neighbours

(you need them both in mitigation and adaptation)

13 Contact



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