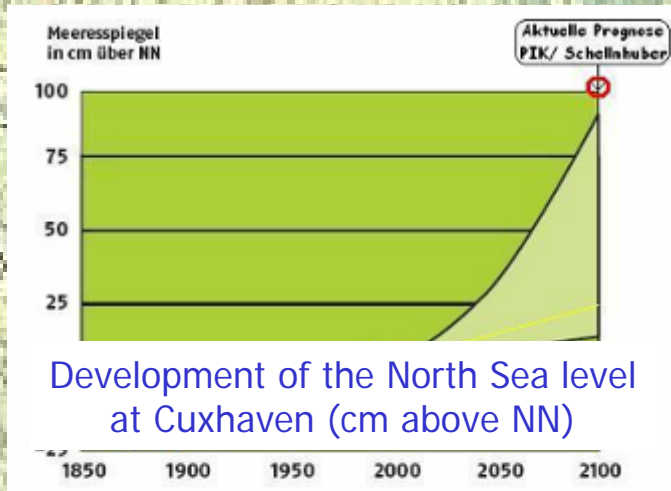


# CARE-North<sup>+</sup>

Michael Glotz-Richter,  
Senior Project Manager „Sustainable Mobility“,  
Free Hanseatic City of Bremen



# Climate Change – the risks



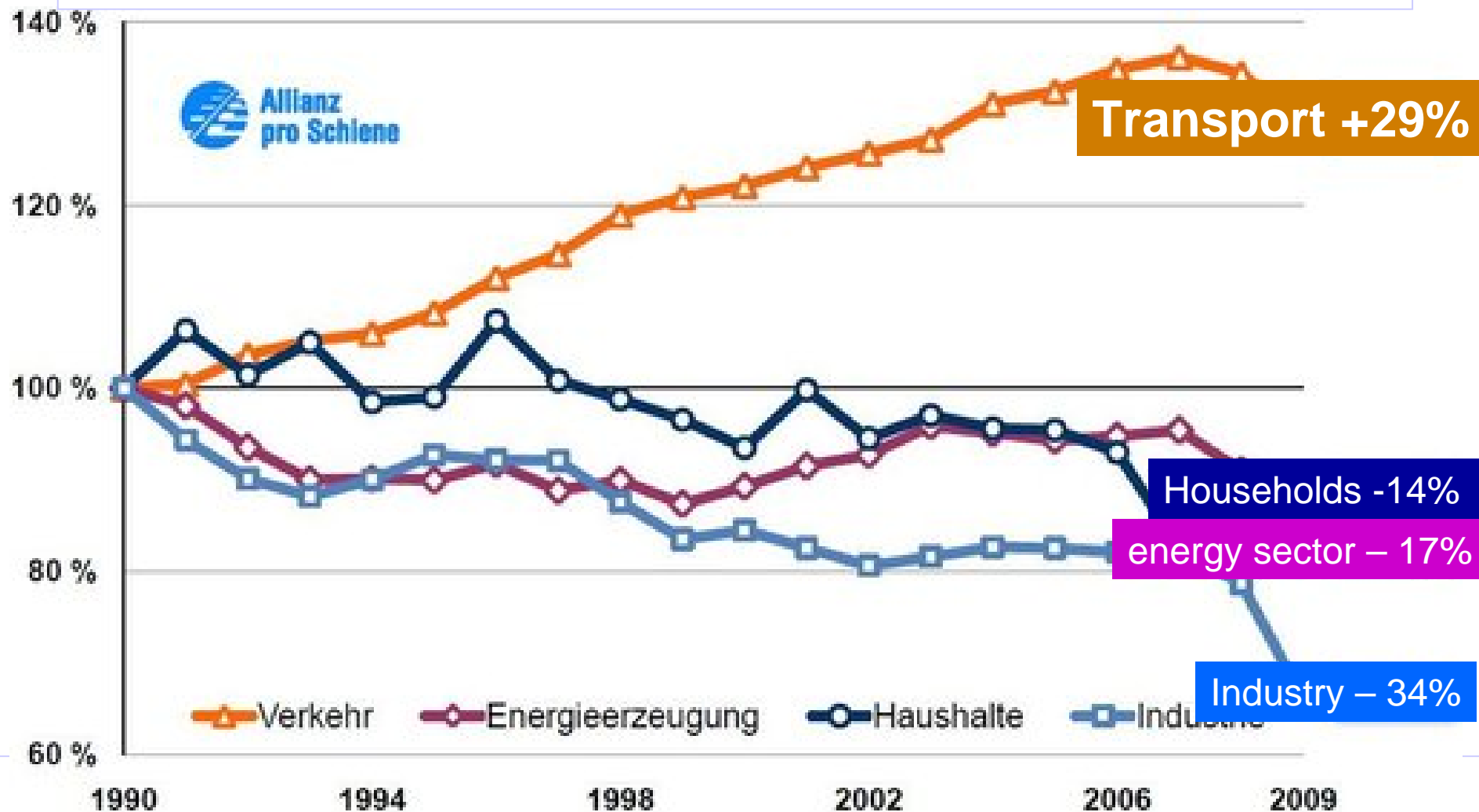
Development of the North Sea level at Cuxhaven (cm above NN)

Entwicklung des Meeresspiegels am Pegel Cuxhaven.

Graph: Frankfurter Rundschau online

# CO<sub>2</sub> – the transport problem

CO<sub>2</sub>-emissions (by sectors) 1990 - 2009



# transport – the oil problem

## Kraftstoffpreise

Super E10 166<sup>9</sup>

Super 169<sup>9</sup>

ultimate 102 175<sup>9</sup>

Diesel 155<sup>9</sup>

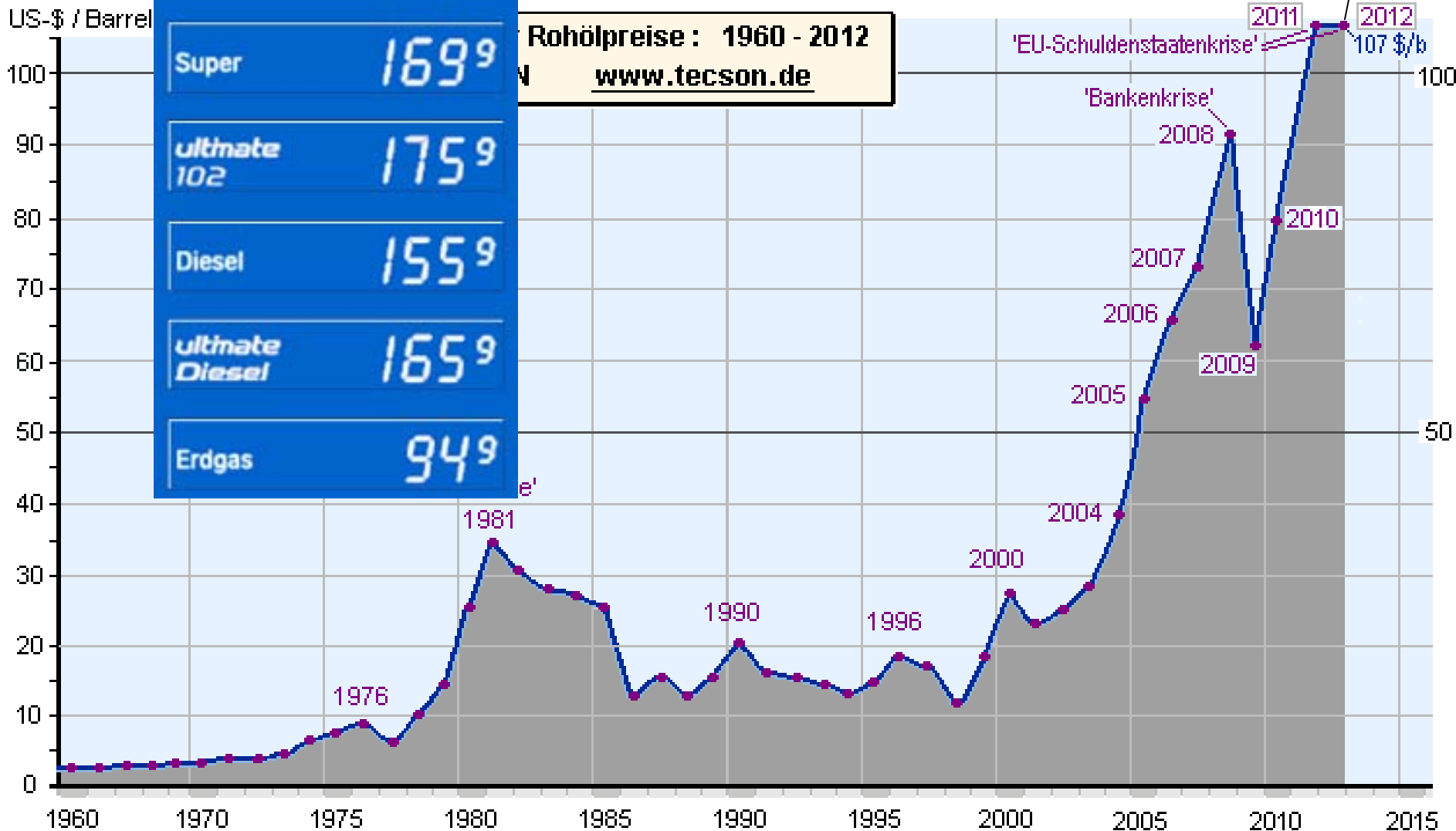
ultimate Diesel 165<sup>9</sup>

Erdgas 94<sup>9</sup>

116,90 \$ / barrel  
(07.02.13) Brent

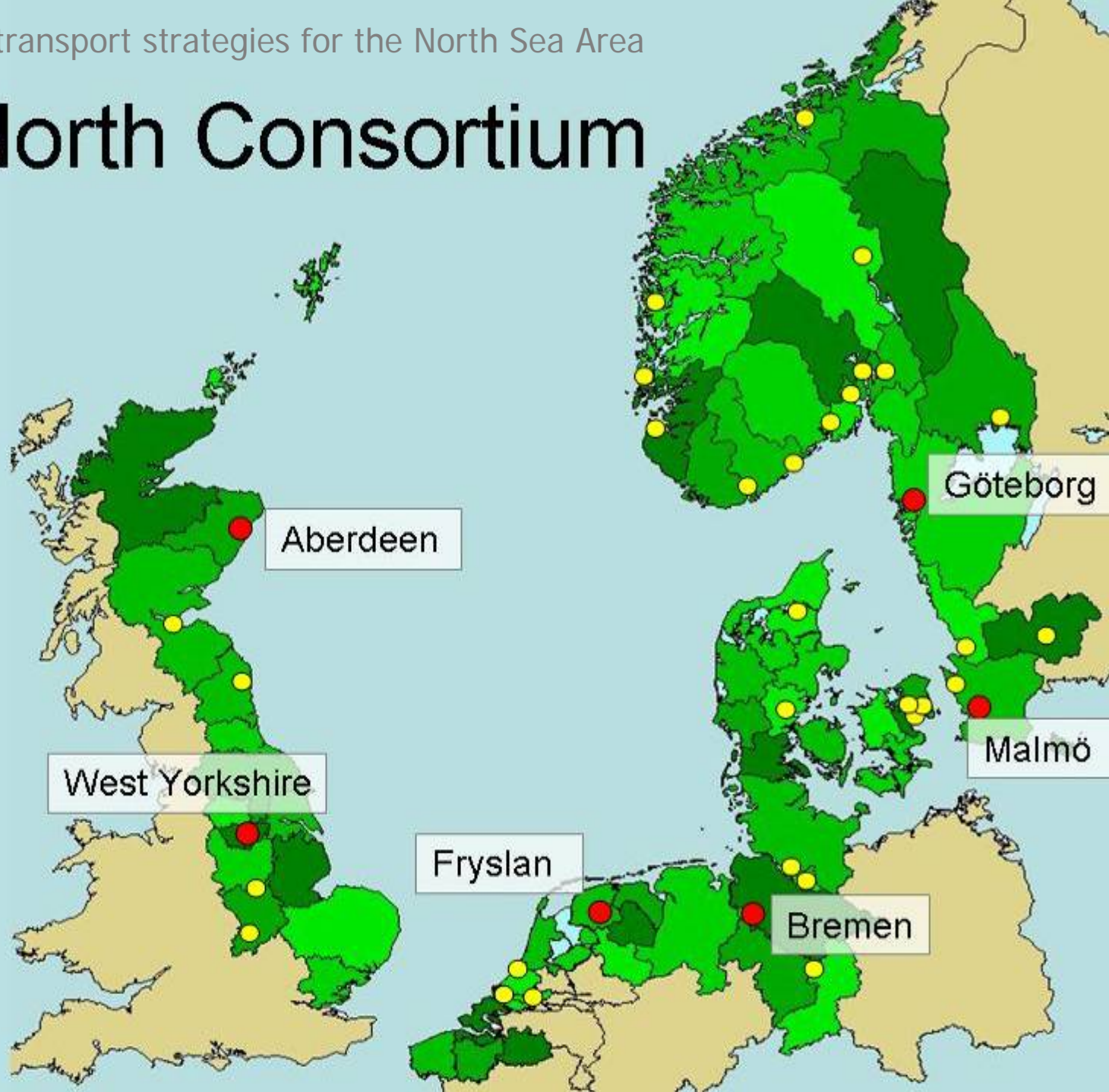
Rohölpreise : 1960 - 2012

[www.tecson.de](http://www.tecson.de)



# CARE-North Consortium

- CARE-North partner
- represented as member of





# CARE North WP low carbon fuels + propulsion



Fryslan



Fryslan



Malmö



Bremen

# CARE North WP low carbon fuels + propulsion



Food versus fuel



# CARE North WP electric vehicles



hybrid waste truck Bremen



Fryslân



Malmö



hybrid waste truck Göteborg



# CARE North WP electric vehicles



Fryslan



Bremen

## Elektromobilität

### RWE erwartet Durchbruch für Elektroautos



© Bild: 2012 DPA/Arno Burgi

Der Energiekonzern RWE rechnet in naher Zukunft mit einem Marktdurchbruch für Stromaautos. "Die Trendwende kann schneller kommen als viele erwarten, wenn die Batterien deutlich billiger und technisch ausgereifter werden", sagte Effizienz-Chef Ingo Alphéus der "Financial Times Deutschland" (FTD/Mittwoch). Dabei verwies er auf die Fotovoltaik, deren

You are here: Home > News

**Electric car breakthrough expected in 5 years**

**No breakthrough for EVs in next decade: KPMG**

Despite the push, don't expect to see electric cars take off in the near future ...

...really zero emission?



CO<sub>2</sub>-Intensity DE ca. 580 g/kWh (2008)

CO<sub>2</sub>-Intensity SE ca. 40 g/kWh







***... before introduction of clean vehicles...***





***...after introduction of clean vehicles...***



# CARE North WP mobility culture / cycling





# CARE North WP mobility culture / cycling



Electrically supported bikes (Bremen)



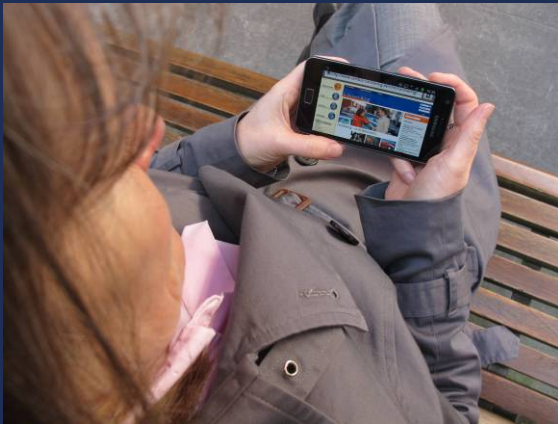
Bike-counter Malmö



Bike-station (Malmö)








# CARE North WP mobility culture / Car-Sharing



**cambio** CarSharing Bremen

### Vehicles in Bremen

Price class	
S	 Ford Fiesta 5-türig
	 VW Polo
M	 Astra Kombi 'H'
	 Ford Focus 5-türig
	 Opel Combo
	 VW Caddy
L	 Transit- Transporter
	 Ford Transit- Bus



...buying a cow for a glass of milk ?



# CARE North WP mobility culture / Car-Sharing







**Aberdeen's first car club gears up on launch day**  
02/04/12

## April launch for Aberdeen car club

By Danny Law 3 February 2012 06:30 GMT

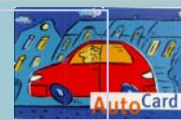
[Tweet](#) 1 [+1](#) 0 [Like](#) 0



Club: The cars will be bookable either online or by phone.







Verkehrssenator Reinhard Loske (l.) und Gewoba-Chef Volker Riebel freuen sich über den neuen „Cambio“-Standort am Rembertiring  
Foto: SANDRA BECKEFELDT

## Senator weiht neuen Stützpunkt ein Bremer, teilt Euch noch mehr Autos!

Mitte - Car Sharing wird in der Hansestadt immer beliebter. Schon über 6000 Bremer nutzen die Fahrzeuge des Bremer Anbieters „Cambio“.  
Gestern weihte Verkehrssenator Reinhard Loske (Grüne) gemeinsam mit Gewoba-Chef Volker Riebel einen neuen Mobilpunkt am Rem-

bertiring ein. Dort stehen jetzt acht Fahrzeuge, die auch die Gewoba kräftig nutzen will. Riebel: „Dadurch können wir unseren Fuhrpark um fünf Fahrzeuge verkleinern, so einen Beitrag zur CO2-Einsparung leisten.“  
Gleichzeitig wurden gestern noch Mobilpunkte am Tannhäuser

Platz (Östl. Vorstadt) und an der Thedinghauser Straße (Neustadt) in Betrieb genommen.  
Bremen will bis zum Jahr 2020 mindestens 20 000 Menschen für das Car Sharing gewinnen. Dadurch sollen in innerstädtischen Wohngebieten bis zu 6000 Autos verschwinden. (ahm)

## 世博会不来梅案例馆探源：“汽车共享”成时尚

人民网驻德国记者 刘华新

2010年10月08日20:40 来源：人民网

[字号大 中 小] 打印 留言 论坛 网摘 手机点评 纠错 E-mail推荐



10月5日，德国不来梅市又一处“汽车共享”服务点开业。图为不来梅市政府环境委员莱因哈德·洛斯克博士（中）等出席剪彩仪式。彩带中间用中、英文写着上海世博会的主题“城市，让生活更美好”。人民网记者 刘华新摄



# Financial framework....



5 € / litre

## Kraftstoffpreise

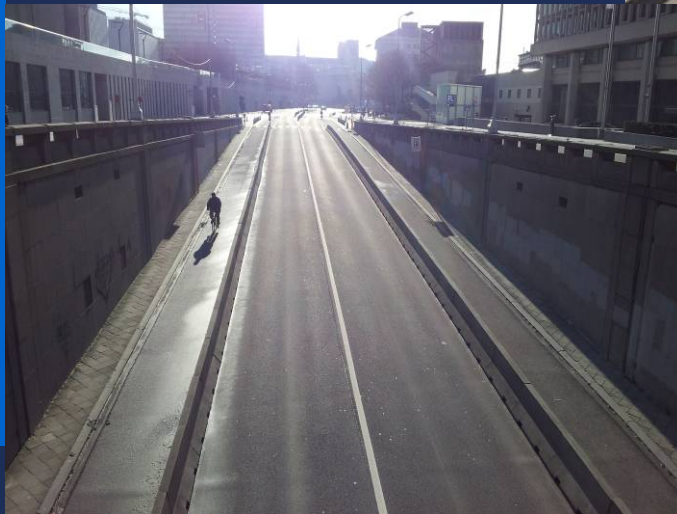
Super E10 519<sup>9</sup>

E 85 495<sup>9</sup>

CNG / Biogas 471<sup>9</sup>

Diesel 499<sup>9</sup>

H2 419<sup>9</sup>



# CARE-North

Carbon responsible transport strategies for the North Sea Area



## The challenge of carbon-responsible transport

Between 1970 and 2004, global GHG emissions from the transport sector increased by 120%. In 2006, transport accounted for 23% of global greenhouse gas emissions. Although some parts of the North Sea Region have had success in leveling out their overall GHG emissions, transport-related CO<sub>2</sub> emissions show no tendency of reduction. While the world deals with the effects of climate change, our traditional understanding of protection efforts. Consequently, we face the impending exhaustion of world mineral oil resources. These two factors demand a rethinking of the concept of "transport" (building post-fossil mobility, "accessibility" is understood as the ability of citizens to meet their daily needs safely, comfortably and conveniently, while minimizing the various negative environmental impacts associated with traditional fossil fuel-based transportation).

The CARE-North project combines a comprehensive and strategic approach with an implementation of pilot actions in the context of climate change and increasing oil price.

A project co-financed through the Interreg IV B Programme for the North Sea Region

# CARE-North

From the North Sea Region to a global perspective

The North Sea Region is very much affected by climate change and increasing sea level. Similar to most of its inland neighbor, it is protected by dikes. As yet, the transport factor has not contributed significantly to a low-carbon economy.

But sustainable transport means more than just "low-carbon transport" - it also means providing people with access to activities. Ambitious and innovative projects in the North Sea Region show some new approaches and solutions.

It is nearly 70 years since the Rio Summit called the world to act more sustainably. And it is four years since the European CARE-North project started its work. A number of ambitious cities and regions in the North Sea Region have worked together to develop more carbon-responsible transport strategies. The CARE-North project is happy to share its ideas and experience.

The partners of the European project CARE-North (Carbon-Responsible Transport Strategies for the North Sea Area) were care-north.eu have discussed priority areas on the subject of urban mobility. Their conclusions lead into the position papers that IGLLE will present during its next World Congress and in the lead-up to the UN conference, particularly in the context of the green economy.

## Create a carbon-neutral, climate smart, resilient city...and generate green jobs

Climate change of their mode of travel can be influenced through the planning and improvement of the services and assets offered by the city. Local governments and stakeholders can reduce the spread of private vehicles and improve accessibility by improving the frequency, coverage area, safety, environmental performance and speed of public transport services.

Cities can also create policies to encourage smart mobility designs and decisions, including carbon offsetting of newly built infrastructure and awareness raising among citizens.



Introducing a cow for a green economy

June 2012

The overlap and complementarity of these priority areas and existence of the importance of holistic solutions. Efforts in one area need to be aligned with efforts in others in order to exploit potential synergies. An integrated holistic approach at the local level and harmonization with the various levels of governance is essential to succeed.

Win-win situations need to be created, whereby the citizen, the environment and the city in the form of both the local government and collaboration, including businesses all benefit from the new set of "mobility conditions".

**Challenges**

- mineral oil dependence
- climate protection
- greening transport

**Innovative Solutions**

- Lighthouse projects for low-carbon mobility
- mobility culture
- alternative fuels and more efficient vehicles

**There is no silver / Technical solution. We need an approach combining technical measures, better spatial planning and incentives for behavioural change.**



**共享远景 SHARING A VISION**

Logos: Bremen, European Union, etc.



# Apples and ideas – a transnational approach

“If you have an apple and I have an apple and we exchange these apples then you and I will still each have **one** apple.

But if you have an idea and I have an idea and we exchange these ideas, then each of us will have **two** ideas.”

(George Bernhard Shaw)



...there is much more to do...

# thank you for your attention

# END

CARE-North@umwelt.bremen.de

Der Senator für Umwelt,  
Bau und Verkehr



Freie  
Hansestadt  
Bremen



The Interreg IVB  
North Sea Region  
Programme

