

≡ Carbon Aware Travel CHoice



Including the carbon dimension in transport-related urban policies and in individual travel choices through an open knowledge platform

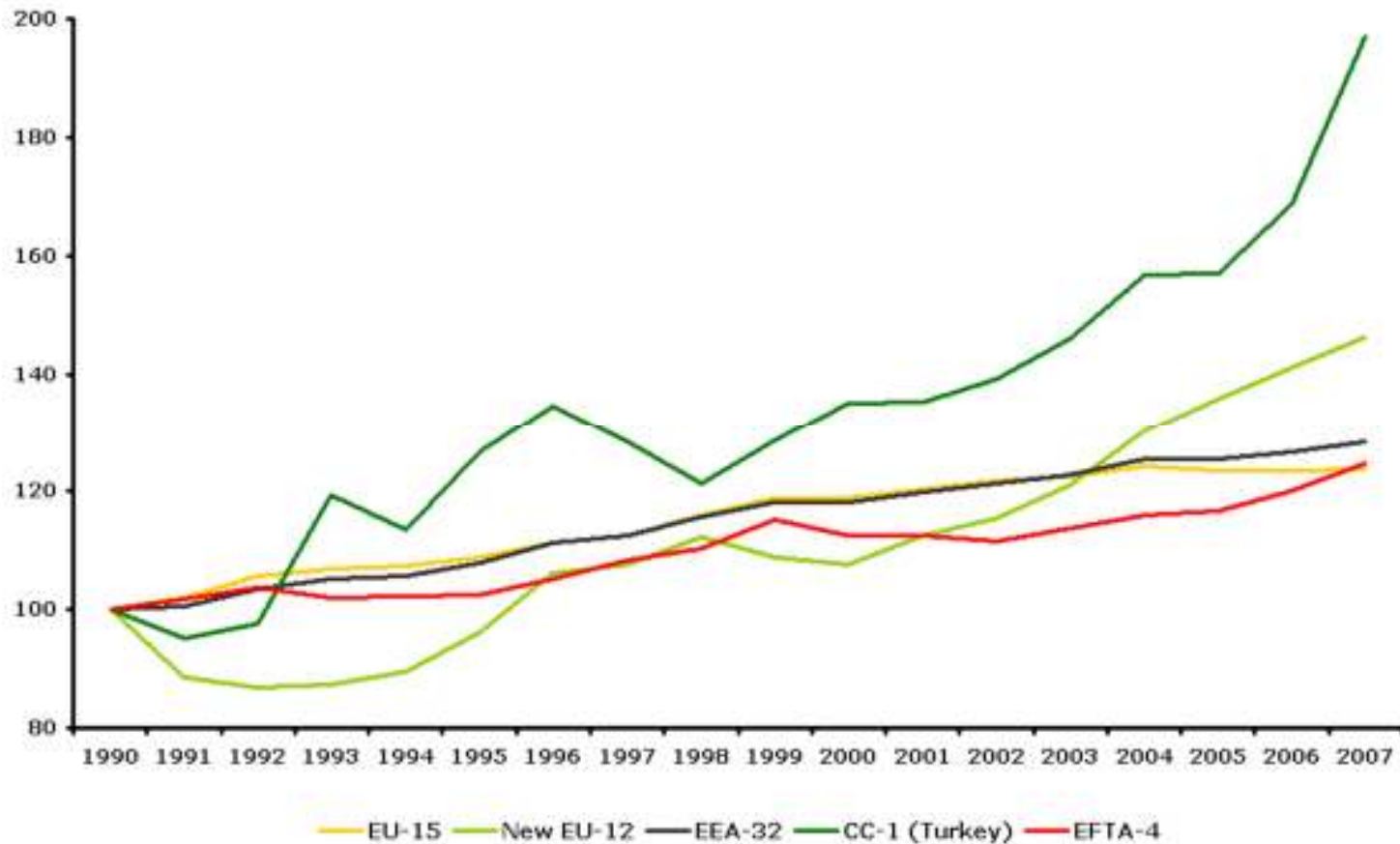
Dr Anna Clark, Polis



10th September 2010, CEMR Transport WG Meeting, Brussels



≡ Transport emissions going up & up...

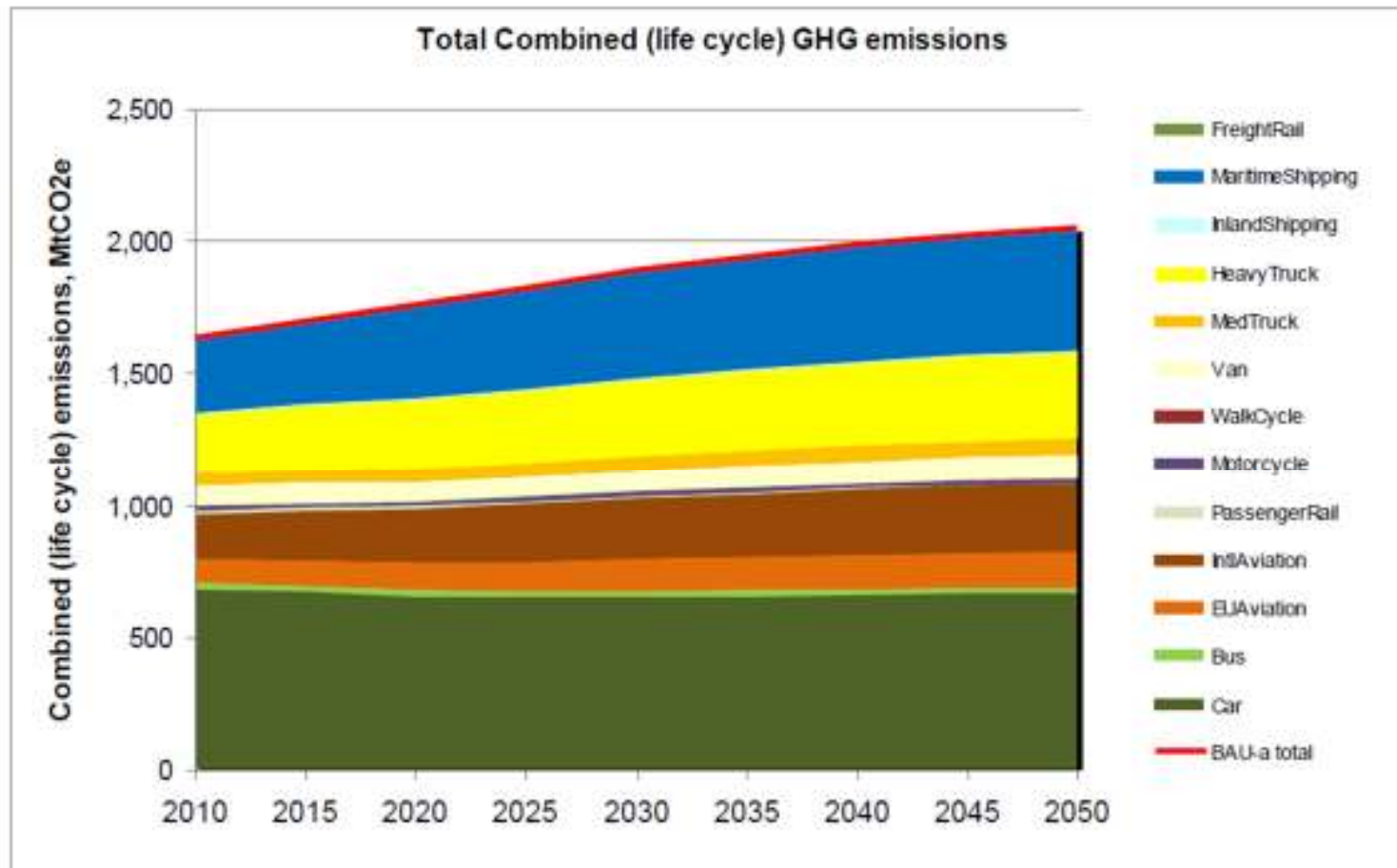


Source: TERM report 2009, EEA

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What if we do nothing?



Source: SULTAN Illustrative Scenarios Tool, developed for this project



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Climate and the Transport sector



- 13% of Greenhouse Gas (GHG) emissions
- 23% of energy related CO₂ emissions
- 71% of total GHG emissions are from urban areas



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The problem



- (Urban) transport sector needs to de-carbonise
- Technology is not enough (although is still needed...)
- Need modal shift, and demand management too!
- Need to do something, but how?

It is essential that both technical and non-technical options are taken up¹

1. Towards the decarbonisation of the EU's transport sector by 2050. Final report from project *EU Transport GHG: Routes to 2050*. June 2010



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≡ It's about reducing CO₂ emissions



CATCH will

develop a knowledge platform that will help urban stakeholders in moving to a less carbon intensive transportation system.

≡ Target groups



- Informed users
 - Environmental impacts of policies.
 - Plug knowledge gaps.
 - How to incite behavioural change.

- General public
 - Impact of travel behaviour on carbon emissions.
 - Encourage behavioural change.



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≡ Informed users – you!



- Help in reducing carbon dioxide from urban transport.
 - Case studies
 - Methodologies
 - Links



- How to communicate the need for low carbon travel to citizens and politicians.
- Information on links to co-benefit areas.



≡ It's not just the information



Think about how information is presented.

How do people process information?

How do we engage and change traveller behaviour?



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≡ Too much information!



Nutrition Facts		Nutrition Facts		Nutrition Facts		Nutrition Facts	
Serving Size 1 Pack (1kg) Servings per Container 14		Serving Size 1 Pack (1kg) Servings per Container 14		Serving Size 1 Pack (1kg) Servings per Container 14		Serving Size 1 Pack (1kg) Servings per Container 14	
Amount Per Serving		Amount Per Serving		Amount Per Serving		Amount Per Serving	
Calories 240	Calories from Fat 20	Calories 210	Calories from Fat 20	Calories 40	Calories from Fat 10	Calories 20	Calories from Fat 10
Total Fat 4g		Total Fat 2.5g		Total Fat 1.5g		Total Fat 0.5g	
Saturated Fat 0g		Saturated Fat 0g		Saturated Fat 0g		Saturated Fat 0g	
Trans Fat 0g		Trans Fat 0g		Trans Fat 0g		Trans Fat 0g	
Cholesterol 0mg		Cholesterol 0mg		Cholesterol 0mg		Cholesterol 0mg	
Sodium 100mg		Sodium 100mg		Sodium 100mg		Sodium 100mg	
Total Carbohydrate 20g		Total Carbohydrate 20g		Total Carbohydrate 20g		Total Carbohydrate 20g	
Dietary Fiber 0g		Dietary Fiber 0g		Dietary Fiber 0g		Dietary Fiber 0g	
Sugars 20g		Sugars 20g		Sugars 20g		Sugars 20g	
Protein 4g		Protein 4g		Protein 4g		Protein 4g	
Vitamin A		Vitamin A		Vitamin A		Vitamin A	
Vitamin C		Vitamin C		Vitamin C		Vitamin C	
Calcium		Calcium		Calcium		Calcium	
Iron		Iron		Iron		Iron	
Percent Daily Values are based on a diet of other people's secrets.		Percent Daily Values are based on a diet of other people's secrets.		Percent Daily Values are based on a diet of other people's secrets.		Percent Daily Values are based on a diet of other people's secrets.	
Ingredients: Brown Rice, Softly Sticky Brown Rice, Rice Bran, Black Rice, Indian Millet, Spiky Millet, Malted Barley, Chicory Fiber, Chicory Root Extract, Corn, Casein, Sesame, Banana, Rye, Agave, Mandarin, Tamarind, Apple, Wheat, Corn, Potato, Apple, Raisins, Barley, Oats, Salt, Cabbage, Pumpkin, Carrot, Red Lentils, Chives, Spinach, Millet, Skatolol, Mushrooms, Sea Tang, Magnesium, Potassium, Iron, Zinc, Black Sesame Seed, Brown Sesame, Wild Parsley, Green Lentils, Pine Noodles, Plant Sterols, Spirulina, Citrus, Chinese Quinoa, Roasted Sesame, Avocado, Lentils, Lotus Root, Beans, Mushrooms, Carrot, Lentils, Sweet Potato, Barley, Parsley, Spinach, Garlic, Tom		Ingredients: Brown Rice, Sesame, Chicory Root Extract, Rice, Corn, Citrus, Barley, Indian Millet, Spiky Millet, Apple, Sesame, Agave, Raisins, Carrot, Fruit, Fruit, Lentils, Millet, Sweet Potato, Pine Mushrooms, Carrot, Tangir, Magnesium, Citrus, Avocado, Lotus Root, Sesame, Rice, Sesame, Rice, Sesame		Ingredients: Brown Rice, Sesame, Chicory Root Extract, Rice, Corn, Citrus, Barley, Indian Millet, Spiky Millet, Apple, Sesame, Agave, Raisins, Carrot, Fruit, Fruit, Lentils, Millet, Sweet Potato, Pine Mushrooms, Carrot, Tangir, Magnesium, Citrus, Avocado, Lotus Root, Sesame, Rice, Sesame		Ingredients: Brown Rice, Sesame, Chicory Root Extract, Rice, Corn, Citrus, Barley, Indian Millet, Spiky Millet, Apple, Sesame, Agave, Raisins, Carrot, Fruit, Fruit, Lentils, Millet, Sweet Potato, Pine Mushrooms, Carrot, Tangir, Magnesium, Citrus, Avocado, Lotus Root, Sesame, Rice, Sesame	
Serving Size: 1kg		Serving Size: 1kg		Serving Size: 1kg		Serving Size: 1kg	
Directions: Mix one pack of WCA 1.1		Directions: Mix one pack of WCA 1.1		Directions: Mix one pack of WCA 1.1		Directions: Mix one pack of WCA 1.1	



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☰ Context matters



Gain / loss framing

People tend to feel and behave differently when information is presented (or “framed”) in terms of gains or losses. The framing of outcomes could “nudge” towards a specific choice

Commuting choices

by car: 25 minutes

cycling: 20 minutes



By car: 25 minutes

Cycling: you will save 5 minutes on your journey



Cycling: 20 minutes

By car: your journey will take you 5 minutes longer

☰ Do people really understand CO₂?



- CO₂ is an abstract concept that few people *really* understand



For a 5 mile trip is 230 g of CO₂
Sustainable Unsustainable don't know

For a 5 mile trip is 132 g of CO₂:
Sustainable Unsustainable don't know

For a 5 mile trip is 500 g of CO₂:
Sustainable Unsustainable don't know

For a 5 mile trip is 500 g of CO₂:
Sustainable Unsustainable don't know

For a 5 mile trip is 1100 g of CO₂:
Sustainable Unsustainable don't know

For a 5 mile trip is 3000 g of CO₂:
Sustainable Unsustainable don't know

≡ How to sort the information?



- Find out what's wanted.
- Simple as possible.
- Access to a lot of data and information.
- Streamlining of information.



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≡ CATCH knowledge platform



GOOD PRACTICE
DATABASE



VISUAL OPTIONS
&
TOOLS



LINKS TO DATA &
INFORMATION



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☰ Good (and bad) practice database



- Information on city-level policies & reduction of CO₂ emissions.
- Find relevant information on cities that are 'similar' on
 - What's worked
 - What hasn't
 - Co-benefit areas



≡ Links to information and data



- Large amount of information
- Relevancy
- Careful categorisation
- “Platform management group”



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Visual options and tools

our cities are facing many challenges:

- congestion
- health
- safety
- community
- social space
- budget

congestion is inequitable due to the costs of transport and the lack of availability of public transport especially at certain times of the day. Access, to jobs, services, health and other activities, is a human right. Too often this access is not guaranteed.

spam
madrid

Ranking

congestion

health safety community social space budget

reliability accessibility

ranking

- 1 Copenhagen
- 2 Oslo
- 3 Munich

sister cities

- 1 Rome
- 2 Lisbon
- 3 Seville

how can I do better?

did you know?



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☰ How to update?



- The platform is 'open'
- New content to be added continuously
- Quality control from platform management group



≡ What's next



- Further development and testing
- Validation
- Evaluation



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≡ Also tools for individuals



- Not just another carbon calculator!
- Impact on “my city”
- Understand impacts of transport choices

Amount of space required to transport the same number of passengers by car, bus or bicycle.



Car?

Bus?

Bicycle?



CATCH (Carbon Aware Travel Choice)



- Funded by DG RTD
- Start Aug 2009
- Finish Jan 2012
- 30 months
- Budget €2 million



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 **Thank you!**



For more information:

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