Green Digital Charter
&
the network of intelligent Cities for Energy Efficiency

The Green Digital Charter

- **EUROCITIES** initiative
  - **City of Manchester** and **Clicks and Links**
  - **European Commission**

- Commits cities to reduce emissions through ICT

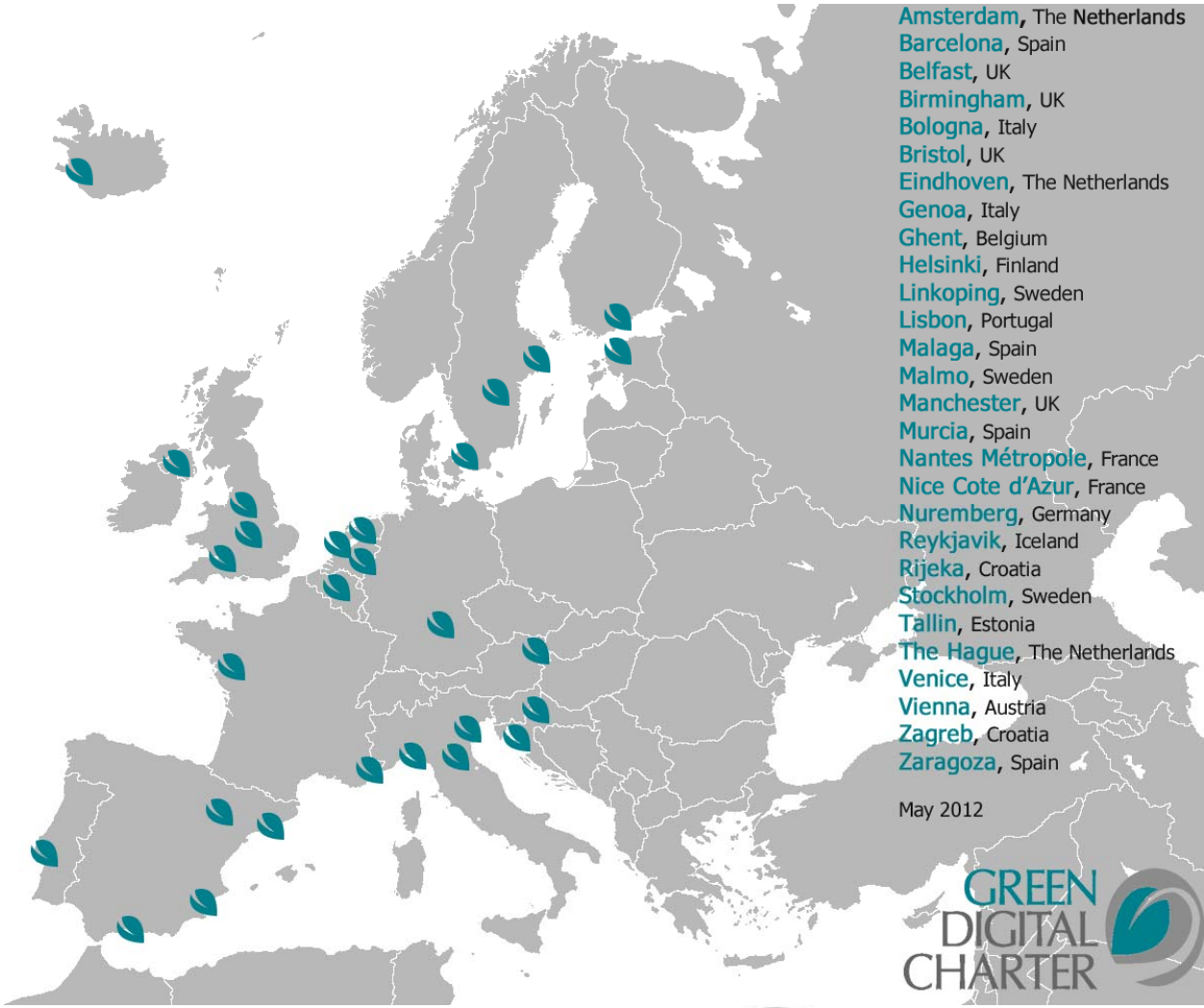
- Promotes **progress in tackling climate change** through the innovative use of digital technologies in cities

Commitments

Three tangible commitments:

- Work with Green Digital Charter **signatories** on ICT & energy efficiency
- Deploy **5 large-scale ICT pilots** per city within 5 years
- Decrease **ICT's direct carbon footprint** per city by 30% within 10 years

The Charter Signatories



28 signatories

50 large cities interested in signing

GOAL: at least 48 signatories by 2014

NiCE Networking intelligent Cities for Energy efficiency

SEVENTH FRAMEWORK PROGRAMME

Cities objectives

GREEN DIGITAL CHARTER

40% carbon reduction **by 2020**

Bristol - Malmo
Murcia - Nuremberg

20% carbon reduction **by 2020**

Bologna - Helsinki

31.64% carbon reduction **by 2020**

Rijeka

60% carbon reduction **by 2026**

Birmingham

21% carbon reduction **by 2020**

Vienna - Zagreb

Carbon neutral by 2050

Gent

NiCE Networking intelligent Cities for Energy efficiency

SEVENTH FRAMEWORK PROGRAMME

The NiCE project

Networking intelligent Cities for Energy Efficiency

- **Budget:** 998,000 € (100% EU financing)
- **Coordinator:** EUROCITIES
- **Partners:**
  - Clicks and Links Ltd
  - Manchester City Council
  - Leibniz institute for Ecological Urban and Regional Development
- **Funding programme:** 7th Framework Programme

Project objectives

Promote and advance implementation of the commitments of the Green Digital Charter

- 1. Replicable implementation and monitoring structure
- 2. Transference of the monitoring and implementation framework to cities
- 3. Facilitation of exchange with similar initiatives in China, and engagement with key stakeholders

NiCE approach

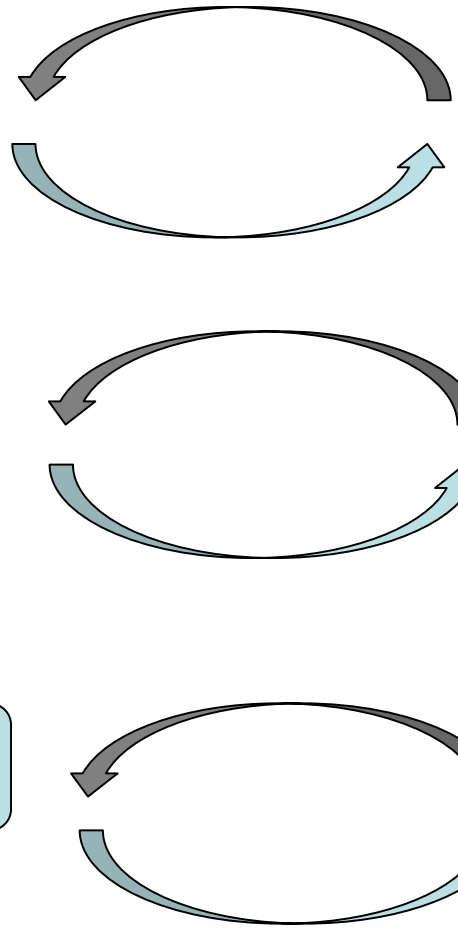
GREEN DIGITAL CHARTER

NiCE

GDC TOOLKIT

SUPPORT TO CITIES

OUTREACH



GDC cities

ADVISORY GROUPS: Reference Cities Group & Expert Advisory Board

NiCE approach

GREEN DIGITAL CHARTER

- Roadmap: online
- Draft: June 2012
- Final: June 2013

GDC TOOLKIT
Action Framework
Action Tools Catalogue
Reporting tools (GDC, CoM, ICT)

NiCE

GDC cities

SUPPORT TO CITIES

OUTREACH

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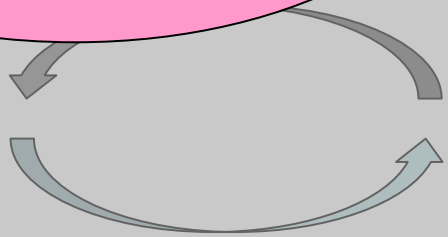
NiCE approach

NiCE

GDC TOOLKIT

- "Measuring Green IT" Belfast, 19 June 2012
- Study Tour Resource Pack – August 2012

SUPPORT TO CITIES
GDC Contact Point
Technical trainings
Study tours



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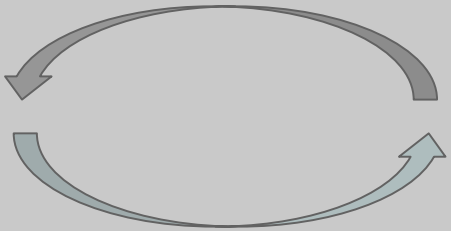


GDC cities

ADVISORY GROUPS: Reference Cities Group & Expert Advisory Board

GREEN DIGITAL CHARTER

N i C E

GDC TOOLKIT

SUPPORT TO CITIE

- Call for roadshows
  - GDC and EU policies/funding
  - Public-private cooperation on GDC commitments
  - Energy & Technology
- Visibility events: Annual ceremony, EUSEW, Open Days
- EAST-WEST

Cyprus, 4 September 2012

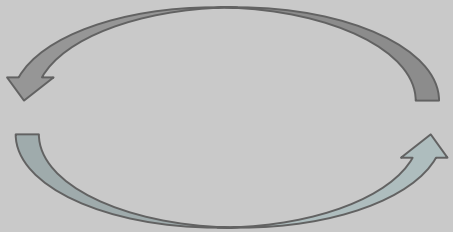
"Green Digital Agenda in Smart Cities – European and Chinese cities leading by examples“

OUTREACH

Roadshows

Cooperation with CoM

Focus on China



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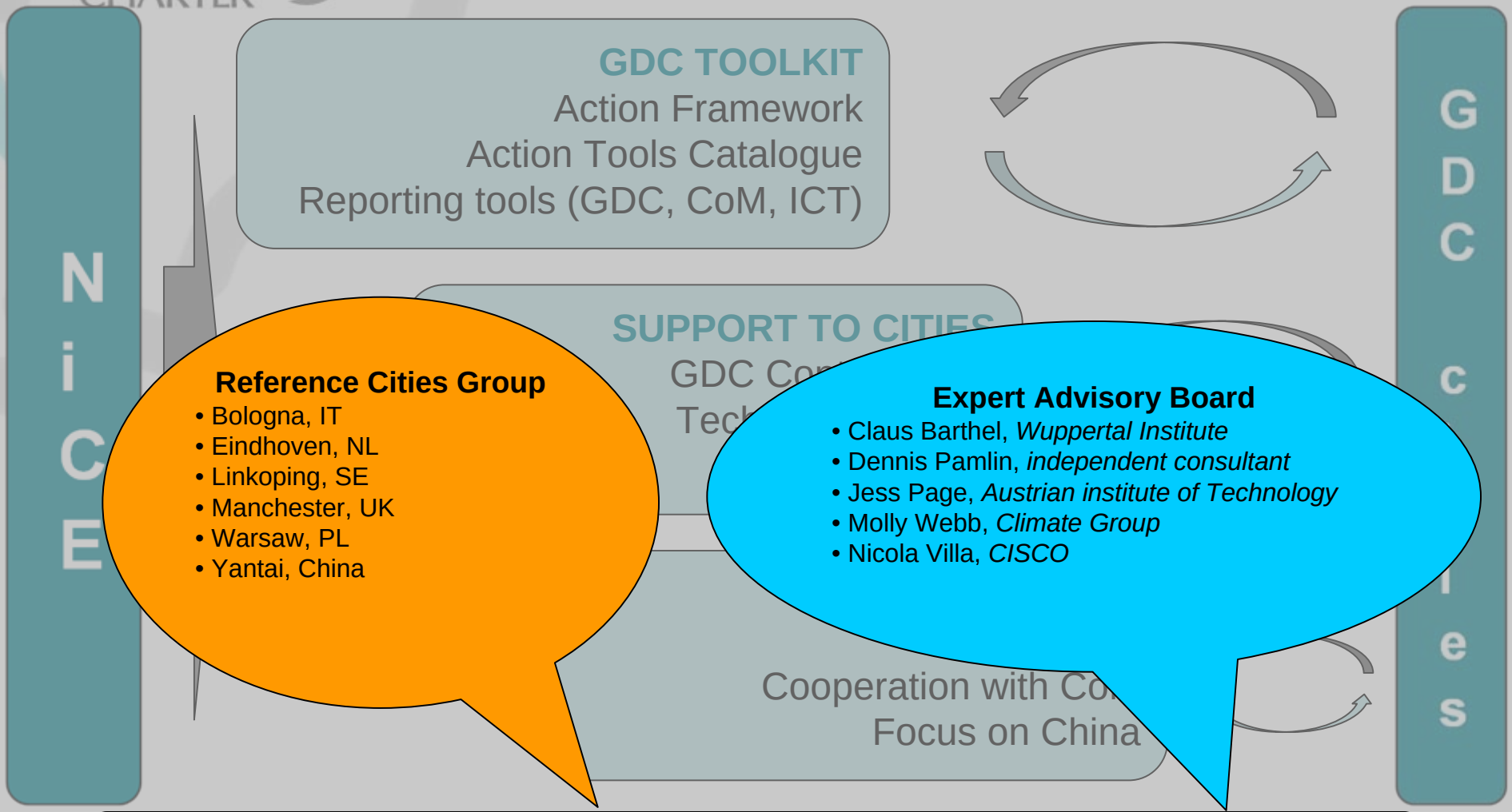
ADVISORY GROUPS: Reference Cities Group & Expert Advisory Board

NiCE approach



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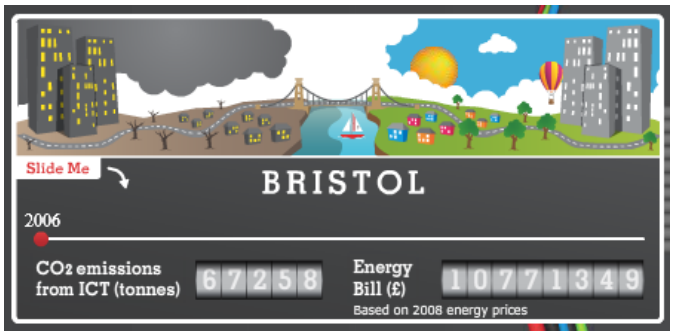
Cities projects: Green ICT

Green IT collaboration in the City of Malmö

- Introduce a model for collaboration concerning Green IT within the municipality departments in the City of Malmö



Green AddICT Bristol

- Carries information on ICT-based carbon dioxide emissions in Bristol including case studies on green businesses, carbon calculators, and statistics on ICT carbon and energy bills.

Cities projects: ICT4EE in buildings

Birmingham AIM HIGH project

- Field test and evaluate the effectiveness of digital technologies for energy saving such as domestic smart meters, heating controls etc in a testbed of 348 homes

Amsterdam Wattcher
Source: http://www.greenlaunches.com/gadgets-and-tech/wattcher_to_curb_energy_consumption_at_home.php

Amsterdam Smart Challenge

- Involve 11 organisations over 2 months using the 'Wattcher' to monitor their energy consumption, thereby becoming more aware of their usage and enabling them to save energy

Cities projects: ICT4EE in transport

Bologna Traffic control centre

- Development of a traffic control centre to manage traffic in the metropolitan area. This will improve traffic flow, provide real-time traffic data, and contributing to the development of municipal traffic planning tools

Tallinn Real-time information system

- Make up-to-date, reliable travel information available to passengers in an effort to increase ridership levels on public transport.

Nice Côte d'Azur Eco Valley

- providing seamless journeys for travelers by coordinating and integrating different methods of transport
- Different pilots: intelligent parking, electric car-sharing schemes and Near Field Communication (NFC) technology around ticketing and payment

Cities projects: ICT4EE in lighting

Energy Efficiency Public Lighting in Rijeka

- 97% of public lights in Rijeka are energy efficient. City spends less energy per light and has sustainable goal to reduce lighting pollution

City of Burgas

City of Rijeka

Genoa ILLUMINATE

- investigate the implementation of “smart” lighting in high quality urban areas, with the aim of piloting innovative solutions and achieve both energy efficiency and improved quality of light.

Cities projects: ICT4EE – cross-sectors

Manchester Smart Environments

- Enable residents to collect data about the city environment through the use of wearable sensor technology as well as sensors embedded in streets, buildings and green spaces.
- *Example: provide info as "at what time of day pollution is at a high" or "how trees help improve the environment"*

Eindhoven sensors

Source: http://www.llga.org/past_edition.php?idPastE=50&any=2011#

Eindhoven Ambient sensor network

- Distributed control system for energy management to achieve efficient energy use
- Awarded the Living Labs Global Award in 2011

Sign the Charter now

GDC signatories & GDC partners

SIGN IN 3 STEPS:

1. Municipal Council decision and application
2. Local Ceremony
3. Supporting documents

BENEFITS FOR SIGNATORIES:

- Free trainings → priority
- Financial support → travel and accommodation
- Visibility → website, events
- Prior access to GDC toolkit and support

More information

www.greendigitalcharter.eu

@GDCharter

Contacts

GDC CONTACT POINT

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