



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

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The Green Digital Charter

- EUROCITIES initiative
 - City of Manchester and Clicks and Links (Green Shift Europe)
 - European Commission

- Commits cities to reduce emissions through ICT
- Promotes **progress in tackling climate change** through the innovative use of digital technologies in cities





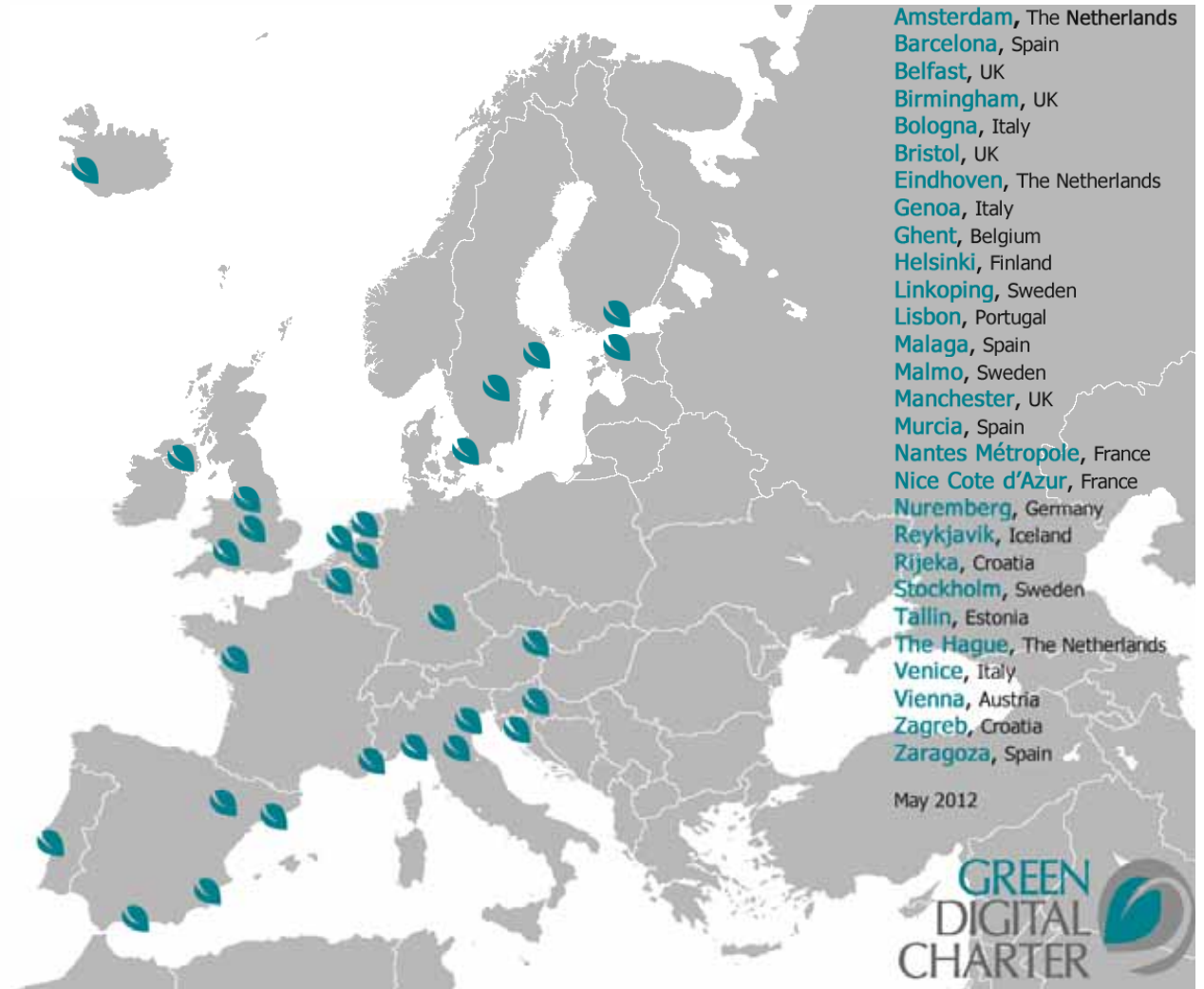
Commitments

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

40 large cities
interested in
signing

GOAL: at least 48 signatories by 2014





Cities objectives

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**

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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
ICT systems for Energy Efficiency
Coordination and support Action
- **Project reference:** 288042





Project objectives

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

- To establish a **replicable implementation and monitoring structure** for the Green Digital Charter
- To **transfer** the monitoring and implementation framework **to cities** and deliver **practical support** for accelerated achievement of GDC commitments in a sustainable way
- To double the number of GDC signatory cities, **facilitate exchange** with similar initiatives in China, and **engage with key stakeholders** to be involved as implementation partners





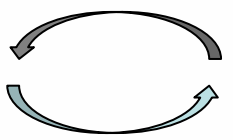
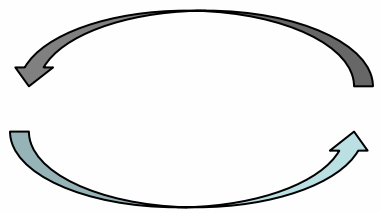
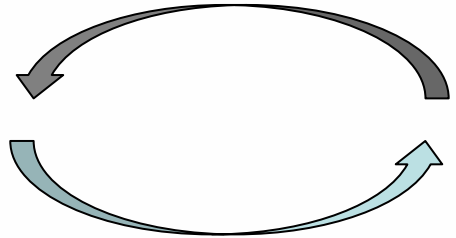
NiCE approach

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

SUPPORT TO CITIES
GDC Contact Point
Technical trainings
Study tours

OUTREACH
Roadshows
Cooperation with CoM
Focus on China



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ADVISORY GROUPS: Reference Cities Group & Expert Advisory Board

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

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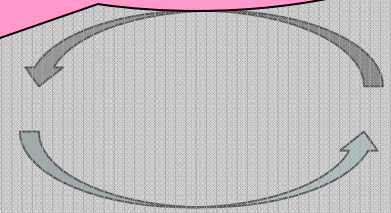
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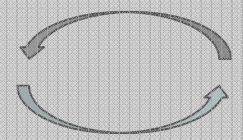
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- “Measuring Green IT”
Belfast, 19 June 2012
- Study Tour Resource
Pack – August 2012

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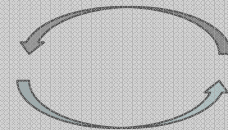
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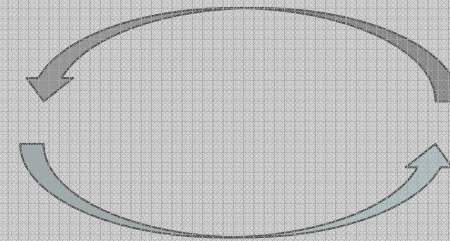


- Call for roadshows
 - GDC and EU policies/funding
 - Public-private cooperation on GDC commitments
 - Energy & Technology
- Visibility events: Annual ceremony, EUSEW, Open Days
- EAST-WEST
Cyprus, 4 September 2012
"Green Digital Agenda in Smart Cities – European and Chinese cities leading by examples"

NiCE approach

GDC TOOLKIT

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SUPPORT TO CITIES

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Tech

Reference Cities Group

- Bologna, IT
- Eindhoven, NL
- Linköping, SE
- Manchester, UK
- Warsaw, PL
- Yantai, China

Expert Advisory Board

- Claus Barthel, *Wuppertal Institute*
- Dennis Pamlin, *independent consultant*
- Jess Page, *Austrian institute of Technology*
- Molly Webb, *Climate Group*
- Nicola Villa, *CISCO*

Cooperation with Co
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Cities projects: Green ICT

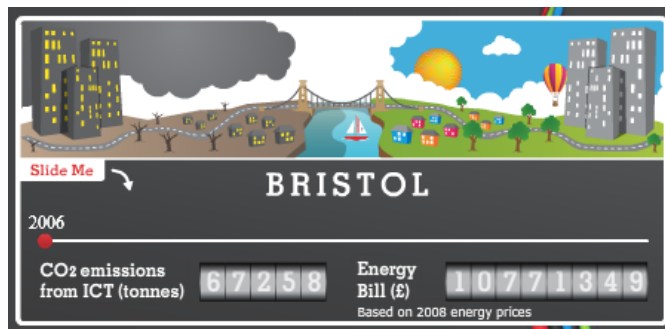
Green IT collaboration in the City of Malmö

- 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



Venice



Country: Italy
Population: 270,000
Member of Covenant of Mayors?: Yes
Politician Who Signed: Gianfranco Bettin, Councillor for Environment and sustainable city and for Computerisation and digital city
Website: www.comune.venezia.it

City Introduction

Venice is a city in the North of Italy; one of the most visited cities in the world. Situated on the Venetian main lagoon, Venice is a unique city due to its morphology. A cosmopolitan city, today Venice has 270,000 residents, rightly considered one of the world's leading cultural destinations. It is dedicated to art in all its forms with its museums, majestic palaces and monuments.

The city urban structure has been deeply transformed in recent years. Significant protection and environmental recovery works have been carried out. The city has led innovative policies for integration and social sustainability.

The present city government has made a clear commitment to creating a green society based on a green economy to support urban, economic and social policies which increase energy efficiency, use clean energy and enhance the historical, natural and environmental heritage of the lagoon and its mainland.

Main Contact

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www.greendigitalcharter.eu

 @GDCharter



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MANCHESTER
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NiCE
Networking Intelligent Cities
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SEVENTH FRAMEWORK
PROGRAMME