

World Cities – Johannesburg March 2017 Clare Mc Keown, Sustainable Development Manager Belfast City Council



Belfast Delegation

Cllr George Dorrian – Belfast City Council

Mrs Sam McCloskey – CASE Centre Sus Energy

Mr Alan Mc Vicker – Strategic Investment Board

Clare Mc Keown – Sustainable Develöpment Manager

Outline

BACKGROUND

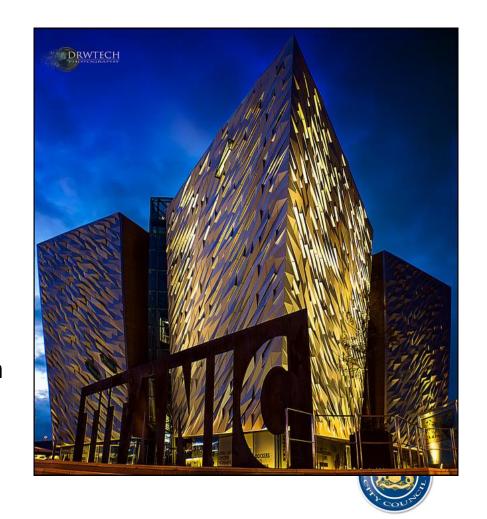
- Background
- City Challenges
- Energy, transport, waste
- Smart City Team
- Rockefeller 100 Resilient Cites bid.
- The Way forward





Belfast Journey so far...

- Post conflict society, peace process embedded.
- Transformative change in local government administration.
- Strong emphasis on growing private sector.
- Belfast is now attractive for smart companies, creative digital, fin tech, smart health devices, cyber security ,application software development.





Belfast City Council Promoting a Smart City

New City Leadership
Comunity planning
Spatial Plans
Regeneration,
parking, economic
development.

Smart City Framework underpins this.
Collaboration
Promote innovation





City Infrastructure Challenges

SustainableTransport **Waste Management Energy Security** Ageing infrastructure Marginalised disengaged neighbourhoods





Belfast City – Energy challenges

- 95% dependent on imported fossil fuels
- End of the pipe for oil and gas supplies.
- 50 % Belfast homes oil dependent for space heating.
- 40% homes in Fuel poverty
- £1.5 billion on importing energy





Sustainable Energy challenge

- Ind. electricity cost approx 10% higher.
- Solutions, smart metering, large scale renewable energy, energy storage.
- Waste opportunity for renewable energy generation through anaerobic digestion.
- This energy challenge formed basis of 1ST Innovate UK Demonstrator and 2nd IOT Bid industrial metering



INNOVATE UK - Future City Demonstrator - £50K

- Low Carbon Communities
- Repurposing old infrastructure e.g. Hydro dams, waste heat from landfill site.
- Smart Technology
- Smart Data Cube
- Local Food project
- All projects subsequently went to next stage funding.
- Kernel of what has evolved as our Smart City Work and the basis our Rockefeller bid.





Belfast City Council Promoting a Smart City

Electric Vehicle infrastructure
Best in EU in terms of
proximity.
Rapid and fast chargers.
Battery storage

All components made or assembled within a 100 mile radius. Local jobs



Digital overlay, CO2 monitoring. Parking apps.

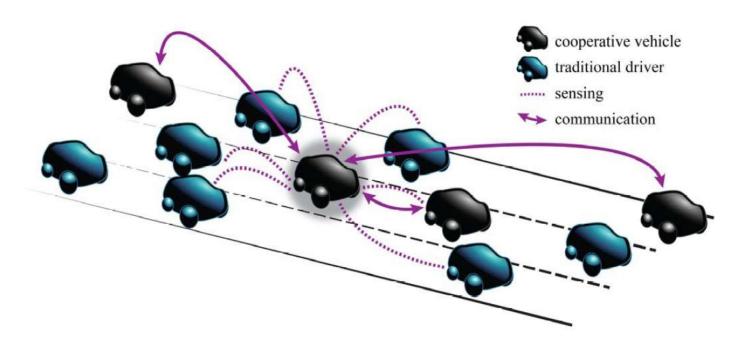




Transport congestion

Cooperation in Mixed Traffic







Waste Challenges

- EU Target 50% recycling rate by 2020.
- Opportunities
- Circular economy
- Sensor Technology
- Smart bins
- Behaviour change, engaging communities
- Producer packaging and component design
- Soluble circuit boards
- HFW Paper cups , Amazon
- Plastic bag tax





SOMETHING AMAZING...

Giant's Park is the largest redevelopment site in Belfast today; comprising 340 acres, the park is a strategically located, unique development opportunity in the North Foreshore.

At 30 Acres, The Giant's Park Cleantech Hub is a unique component part of the scheme and has been conceived to tackle some of the big economic and environmental challenges of the 21st Century.

The site has excellent links to airports, major roads and the port. It offers huge potential to attract investment from the cleantech industry and deliver physical, economic and social benefits for everyone.

Infrastructure works have already started and this is the first step in redeveloping Giant's Park, with preliminary works due to be completed by spring 2016 including 1,734 metres of roads, the installation of key services, improved access, new landscaping and planting.

The £9.5m infrastructure spend at the Cleantech Hub is being part financed by the European Regional Development Fund, under the European Sustainable Competitiveness Programme for Northern Ireland, Invest Northern Ireland and Belfast City Council.

Expressions of Interest are now being sought from parties within the Cleantech sector requiring plots of c. 0.5 acres to c. 30 acres.

This unique development project provides a foundation for developers, investors, and occupiers to be part of the cutting edge, forward looking, cleantech business sector.











How Resilient are we

SustainableTransport
Waste Management
Energy Security
Ageing infrastructure



How Smart are we?

ROCKERFELLER Foundation?



What is Rockefeller 100 Resilient Cities challenge?

- Offices in London, New York. In 2013 the RF foundation was 100 years old.
- As a centennial challenge, over 3 years RF developed a programme of work to with 100 resilient cities globally.
- Over 1000 cities had applied 70 cities had been chosen
- Last cohort of 30 cities
- Could Belfast be successful?



Rockefeller 100 Resilient Cities





100RESILIENTCITIES.ORG

PIONEERED BY THE ROCKEFELLER FOUNDATION

Rockefeller 100 Resilient Cities

- Helping <u>cities</u> around the world become more resilient to the physical, social, and economic <u>challenges</u> that are a growing part of the 21st century.
- 100 Resilient Cities defines resilience as the capacity of individuals, communities, institutions, businesses, and systems within a city to survive, adapt, and grow, no matter what kinds of chronic stresses and acute shocks they experience
- Looking for key features in a city.

Innovative City Leader



Recent Catalyst for change

Transformation in public sector

- Local authorities from 26 to 11.
- New local responsibilities for spatial planning and regeneration.
- Community planning a new city vision for 15 years 'Belfast Agenda'
- Responsibilities for economic development



Ability to work with a wide range of stakeholders

- Government
 Departments, DAERA,
 DFI, DFE, DE, DF,DFC, .
- Community planning 15 statutory partners
- Belfast Strategic partnership
- Skills and employment forum, tourism forum
- Internationally, Boston
- Nashville and Shenyang China.



Process

- Submitted application November 2015
- RF Foundation New York office attended the Paris COP 21 talks – invitation to met
- Facilitated meeting for NI Environment Minister at Climate change talks COP 21
- Further high level endorsement
- April RF Interviewed CX and DCX in Belfast
- Belfast one of four cities invited to Washington in JUNE 2015 for the FINAL announcement



Rockefeller

- Global competition brings
 Belfast into sharp focus
- Rockefeller carries significant weight.
- Springboard new ideas, new approaches
- Tapping into international expertise
- Co investment, where we couldn't previously.



Smart City

- Cyber Security
- Glöbal expertise in CSIT and ECIT:
- Catalyst Inc
- Partnerships with two univerities UUJ and QUB
- CASE and SIB

