



Ireland's Greenest Bus Fleet – An Opportunity for Cork?

**Clarion Hotel, Lapp's Quay, Cork**  
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# What is Energy Cork?

- The industry cluster for the energy sector in Cork working to:
  - be a focal point for the energy sector in Cork
  - contribute to economic growth and job creation in Cork and nationwide
  - build upon resources
    - Physical resources/infrastructure,
    - Human resources/people,
    - Tradition of innovation in the region
  - consolidate and raise awareness of the leading position of Cork in the Energy Sector



Cork  
County Council  
Comhairle Contae Chorcaí



Cork  
**CHAMBER**  
IN BUSINESS FOR BUSINESS

# Where did Energy Cork come from?

- Energy Cork – timeline
  - Inspired by Cork Chamber policy paper in 2010
  - Formation at Stakeholder Workshop in April 2011
  - Launched in December 2012
    - By Minister for Energy
- Energy Cork Stakeholders - working in partnership
  - Large Industry
  - SME
  - Academic /Research Institutes
  - Local government
- Supported by member companies
  - Large energy companies headquartered in Cork
- Governance - industry led Steering Group

# Energy Cork Launch – Dec 2012



# Energy Cork - Where are we now?

- **Energy Cork – Cork’s energy industry cluster**
  - Active membership led organisation
  - Brand, Constitution, documented Strategy
  - Steering Group
    - 14 elected industry members (8 SME members)
  - 6 Membership led Sub Groups – Energy Supply, DSM, Buildings & Construction Standards, Transport, Cleantech, Finance & Investment
- **80 Member Companies**
  - Start-ups, SMEs, multinationals, utilities, research institutions, wind farmers, bio-gas technology , industry groups
- **All Energy sectors**
  - Oil & Gas , renewable energy, transport, cleantech, construction, project developers, energy suppliers, energy services
- **Pipeline of energy industry events for Cork**
  - Highlighting issues of relevance for Cork region
  - Exploring opportunities for economic growth
  - Promoting sustainability

# Why Transport?

- Responsible for 35% of Ireland's energy demand
- >20% greenhouse gas emissions (>33% of energy related emissions)
- Ireland almost 100% dependent on imported oil for transport
- 10% RES Target for transport by 2020 (5.2% in 2014)
- Transboundary gas emissions (NO<sub>x</sub>, SO<sub>x</sub>, PMs), 1,200 deaths per year..
- Traffic congestion and quality of life



# The Oil Price Rollercoaster

## Bord Gáis Energy Index

September 2016



### Oil Index

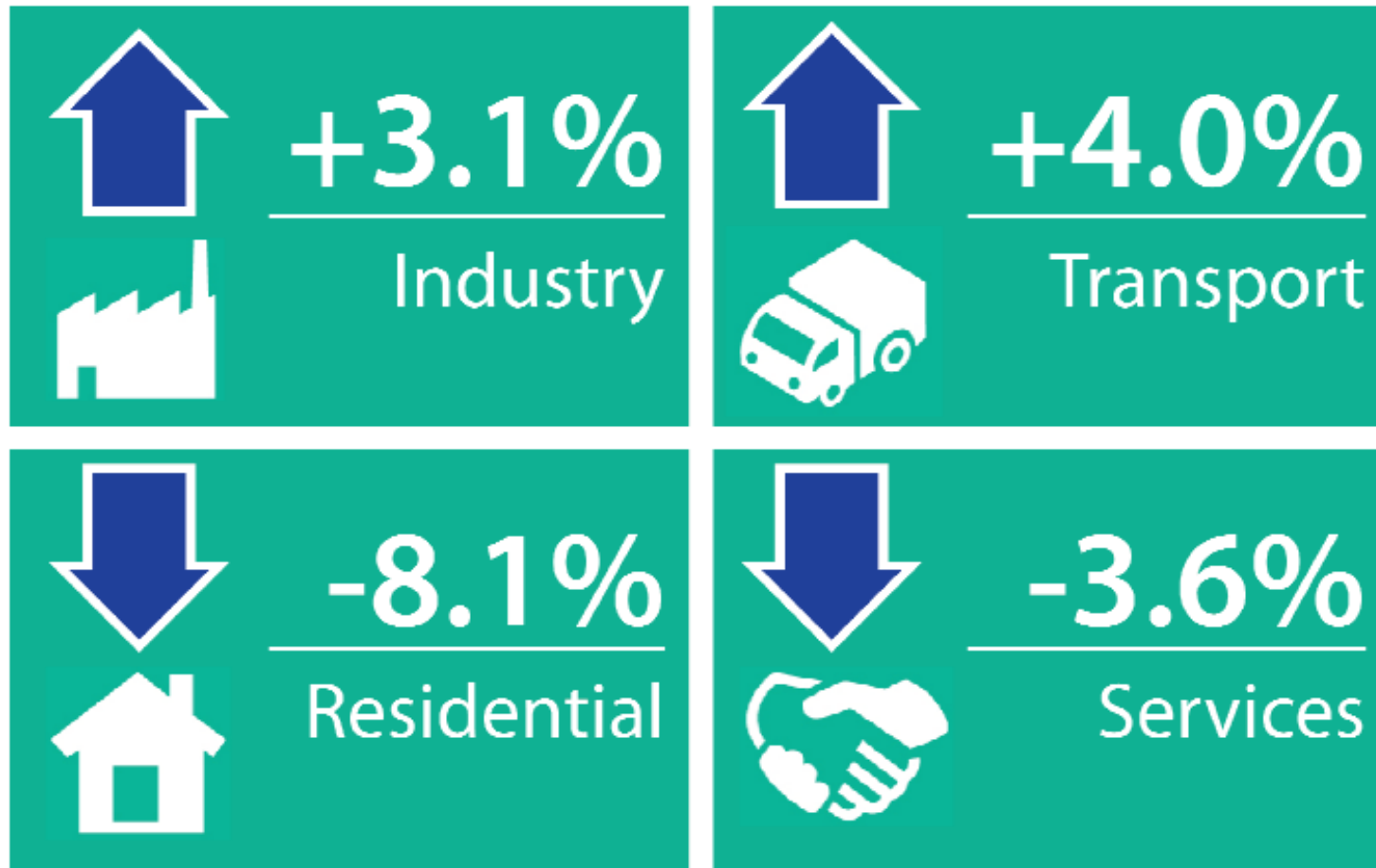


Index adjusted for currency movements.

Data Source: ICE



## Sectoral Energy use change in 2014



# Cork Transport Alternatives 2022



# Cork - a Low carbon vehicle hub

- Energy Cork Transport Alternatives 2022 Conference
  - April 2014 in partnership with the EU's BATTERIE Programme
  - Explored options for sustainable transport in Cork region to 2022
- Energy Cork Transport Sub-Group
  - Developed an industry led policy paper over summer 2014
- *Cork - a low-carbon vehicle hub*
  - Outlines a roadmap for growth of low carbon transport including
    - **electric vehicles (EV)** and;
    - **compressed natural gas vehicles (NGV)**
- Objectives
  - to encourage a step-change in low-carbon vehicle uptake
  - firstly in Cork then nationwide
  - make Cork Irelands hub for EV and NGV/Biogas roll-out

# Ireland's Greenest Bus Fleet



# The IGBF Proposal

- A green/low-carbon future for Cork City's Bus Fleet
- EVs/Hybrids/Natural Gas all options
- Market should decide based on life-cycle costs
- ~100 vehicles transitioned to Green Bus technology
- CNG buses are a well tried and tested technology (in Cork also)
- CNG technology allows for transition to renewable biogas in the medium term



# The Benefits of CNG/Biogas

- CO2 savings versus diesel of 10% for CNG
- Potential for zero carbon with renewable biogas
- Annual fuel cost saving versus diesel
- Reductions of over 70% in transboundary gas emissions
- Increased fuel diversity in the transport system
- Decreased import dependence
- Unlocking the potential of renewable biogas and energy from waste
- Supply chain opportunities for businesses

## Discussion to Date

- Energy Cork
- DTTAS
- NTA
- Bus Éireann
- Gas Networks Ireland
- Cork Chamber
- ERI/UCC
- Cork City Council
- Cork County Council



# Why Cork?

- Bus transport is a key component of the long-term solution for public transport in Cork
- City Centre Movement Strategy (CCMS) will make city more attractive to all users and improve the environment for public transport users
- 11% growth in bus passenger numbers via St Patrick's Street.
- 771 extra bus trips per week over last 2 years
- Successful CNG bus trials in Cork 2012/2013
- Cluster approach – acting locally
- Aligns with Cork's European Green Capital ambitions

# The Context for Drive4Zero - Local -



# Cork's Drive4Zero Launched on the 23rd October 2014

## The Partners!

### Supported by



### Electric Car Partners



### Media Partners



# The Drive4Zero Goal & Offering

## Goal

- Double the number of electric cars in the Cork area in one year
- Double the number of charge points available to Cork EV owners in one year

## Benefits Offered to Participants

- Zero percent financing agreed with car dealers
- Zero electric car charging costs at all participating companies.
- Zero cost parking in the city centre for EV owners
- Preferential parking at all participating companies in dedicated Ecar parking spaces
- Zero cost use of over 60 eCars until the end of the year to disseminate the technology
- Zero M8 toll charge for EVs

# Recipe for Success

## Co-operative Style Project

- Minister Simon Coveney championed the campaign
- All major car manufacturers of Electric Vehicles in Ireland involved
- ESB Ecars onboard
- Large employers (DePuy Synthes, EMC, Janssen, Pfizer, MSD, ESB Networks.....) in the Cork area who gave a commitment to install charging infrastructure on their sites a their cost
- County and City councils and SEAI
- Commercial parking providers in the City Centre and M8 Toll Operator

## Funding

- Project fund of over €60,000 sourced from partners directly

# Drive 4 Zero - Results and Future Plans

## Results

- Ground-up approach with enthusiastic champions
- Initiative supported and facilitated by large Cork employers
- 30 new charging points at 15 employers
- 78 new EVs in 2015 – 264% increase on EVs in Cork (Visibility)
- 650 Q Park parking spaces allocated
- 25 M8 Toll Cards
- 10 Company based events to showcase EVs

## Future Opportunities

- R&D collaboration opportunities with partner companies in support system analytics
- Drive4Zero nationally?
- [www.drive4zero.ie](http://www.drive4zero.ie)



# What's Next?

- Need to encourage continued growth in public transport and human powered transport in Cork
- CCMS is an integral part of this growth
- Less congestion and cleaner vehicles benefit everyone in Cork
- Bus Éireann and NTA are responsible for all routing and procurement decisions.
- DTTAS Green Bus Fund can unlock green bus potential
- Cork has shown that it can lead re low-carbon transport



**ENERGY  
CORK**

**THANK YOU**

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