



Energy for  
generations

# Make Better Use Of Your Energy

Save money while saving the planet

John Walsh, Smart Energy Services



Today, a brighter future means a low carbon future.

Ireland needs to reduce its emissions from energy by 80% by 2050



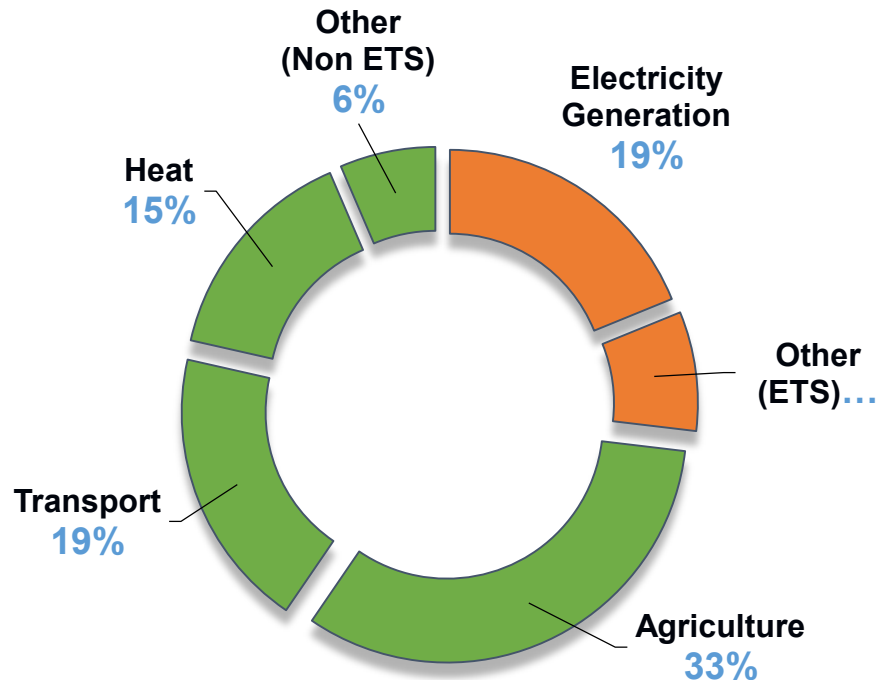
from  
32m tonnes of CO<sub>2</sub>



to  
7m tonnes of CO<sub>2</sub>



## Ireland's carbon emissions



We are **20%** of  
**The Problem**

We want to be **50%**  
**of The Solution**

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of **The Solution**



## 80/20 Rule

### **Change of Focus Required**

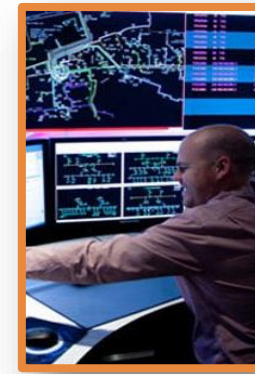
Electrification of heat & transport is  
central to decarbonisation  
Balancing Climate, Customer needs  
and affordability

## How?

**Decarbonise electricity and electrify heat and transport**



Low carbon  
generation



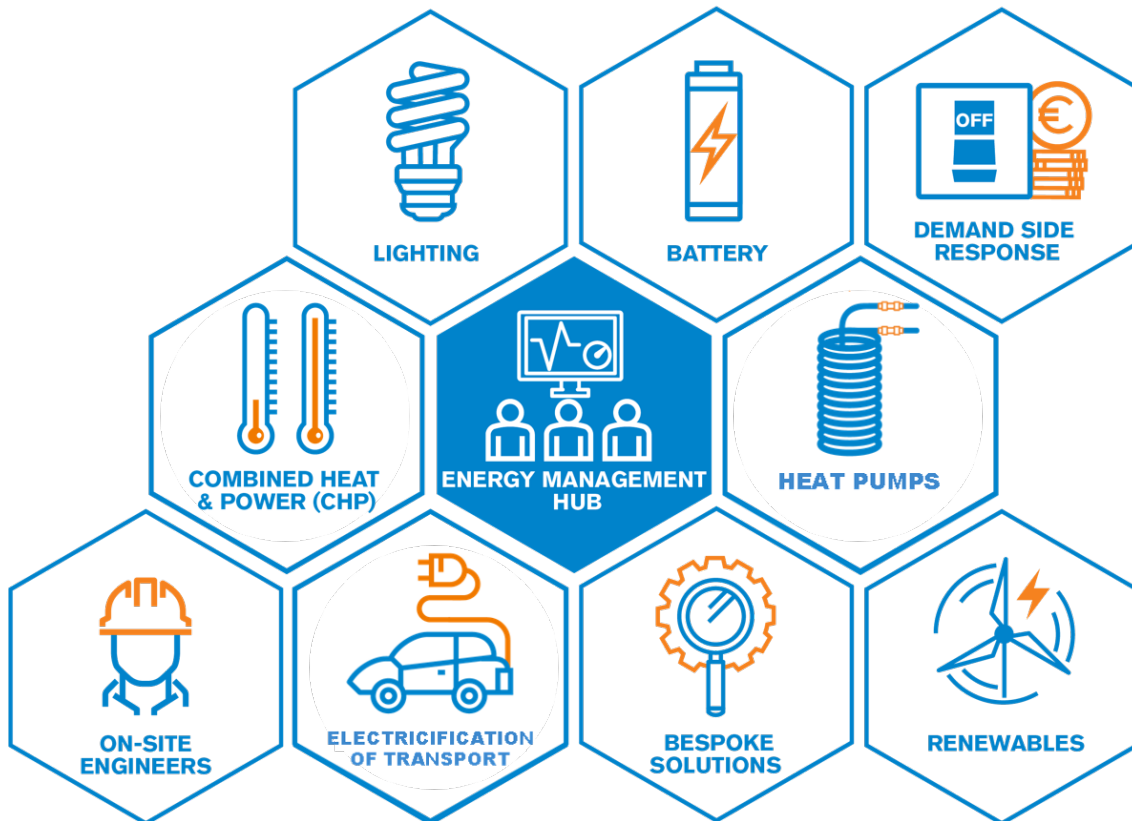
Smart  
Reliable  
Networks



Empowered,  
informed  
customers



Electric  
heating and  
transport



## We offer a range of energy solutions for large energy users

- Tailored solutions
- Funded models – meaning no upfront investment required
- Project management and delivery
- Scalable models

# WE WORK WITH CO-OPS AND COMPANIES INCLUDING





# LANDING LOWER ENERGY COSTS AT DUBLIN AIRPORT

## ESB partnered with DAA to improve energy efficiency and reduce energy usage by 33% before 2020

### THE PARTNERSHIP:



Since 2014 DAA has been working in partnership with the ESB to identify opportunities to improve energy efficiency and reduce carbon emissions at Dublin Airport.

### THE RESULTS:



A 110 kW solar array comprised of 268 photovoltaic panels covering 650m<sup>2</sup> was installed and activated within two months, delivering as much as half of the reservoir's required power.

*"In partnership with the ESB we are aiming to reduce our energy consumption by 33% by 2020. We want to be leaders in this field and help Ireland meet national obligations in the process."*

**Dalton Philips, CEO, daa**

### THE ASK:



To provide a solution that would assist daa in reducing energy costs whilst meeting its public sector obligation, and positioning it as an international energy exemplar.

### THE COMPETITIVE ADVANTAGES:

- Aggressive energy saving targets achieved, position DAA as an industry exemplar
- Reduced carbon footprint and energy cost per passenger
- Energy supply resilience = reduced dependency on the grid

### THE TECHNOLOGY:



Photovoltaic panels trap the sun's energy in semi-conductor materials such as silicon, which contain a high concentration of electrons. It runs on ambient daylight as well as direct sunlight.



# DIVING INTO ENERGY SAVINGS WITH ONE OF IRELAND LARGEST LEISURE MANAGEMENT COMPANIES



ESB partnered with Coral Leisure to deliver significant cost and energy saving solutions at scale under a tight time restriction

## THE PARTNERSHIP:



Coral needed a partner that could deliver significant cost and energy saving solutions at scale, while managing the application and administration of grant funding

## THE ASK:



Coral needed a partner capable of implementing energy saving solutions, with no requirement for up-front investment.

## THE TECHNOLOGY:



Energy-efficient LED lighting retrofits across all facilities. Swimming pool covers, destratification fans and improved heat controls and a 50 kilowatt Combined Heat and Power (CHP) generating plant

## THE RESULTS:



Solutions ranged from energy-efficient LED lighting retrofits to the installation of a 50 kilowatt Combined Heat & Power unit in Coral's leisure centre in Cobh, Co. Cork.

## THE COMPETITIVE ADVANTAGES:

- Reduced energy costs per visitor
- Capital expenditure offset by energy cost savings
- Greater control over energy usage & costs
- Green credentials create pride within the community

*“ESB delivered a range of energy efficient solutions in Coral leisure centres across Ireland, contributing to a 25% reduction in our energy bills.”*

**Siobhan Tighe, Managing Director, Coral Leisure**





# DELIVERING A CLEAR ADVANTAGE TO A GLOBAL GLASS MANUFACTURER



ESB partnered with Ardagh Group to increase resilience and energy security with the implementation of a sustainable solution at its production facilities across the group.

## THE PARTNERSHIP:



Delivering a best-in-class energy solution that enabled them to better optimise their power usage onsite at its glass manufacturing plant in Irvine, Scotland.

## THE RESULTS:



Delivering a best-in-class energy solution that enabled them to better optimise their power usage onsite at its glass manufacturing plant in Irvine, Scotland.

## THE ASK:



The Ardagh Group needed a solution that would reduce the plant's reliance on the grid and support voltage levels in the event of a power dip.

## THE COMPETITIVE ADVANTAGES:

- Energy security & supply resilience
- Greater control over energy usage & costs
- Industry-leading sustainability

## THE TECHNOLOGY:



A grid-optimising platform operated by our partner Grid beyond leverages a 2-MegaWatt Tesla-made storage battery. With a 10-year warranty, Tesla's battery offers a technological edge as well as investment security.



*"We needed a cost-efficient, 100% effective battery storage solution capable of supporting our operational requirements and reducing the plant's reliance on the grid, as well as its environmental impact. ESB Smart Energy Services delivered."*

**Annelene Fisser, CSR & Sustainability Manager, Ardagh Group**

# A BRIGHT IDEA HELPS NORTHWEST CO-OP CUT ITS CARBON FOOTPRINT



**ESB partnered with Aurivo to reduce energy and management costs, as well as improve the employee and shopper experience**



## THE PARTNERSHIP



In 2018 ESB Smart energy Services partnered with Aurivo Agribusiness, a multipurpose cooperative with interests across a variety of businesses, including the Homeland Stores and Garden Centre retail chain

## THE ASK:



Seeking ways to reduce energy and management costs, as well as improve the employee and shopper experience, the Sligo-based group tasked Smart Energy Services with delivering a lighting retrofit across 14 retail outlets and the Company's dairy plant and feed mill.

## THE TECHNOLOGY:

In collaboration with Electric Skyline, the team delivered bespoke lighting systems across 16 locations. Comprised of LED Lighting, monitoring systems and remote controls, the new systems provide Aurivo with an easy way to monitor usage patterns and identify inefficiencies, control energy usage and instantly establish when and where maintenance is needed

## THE RESULTS:



- Reduced maintenance costs
- Significant reduction in consumption of electricity
- Energy cost savings of over 50%

## THE COMPETITIVE ADVANTAGES:

- Reduced carbon footprint and greater sustainability
- Improved customer experience
- Control over energy usage and cost
- Reduced maintenance costs and downtime

“Lighting is a main focus in our business. With 34 stores and animal feed mills, we were delighted to team up with ESB on the LED lighting initiative. Our focus for Aurivo Agribusiness is to provide a more sustainable environment for our customers and team members”

**Pat Igoe, Sales and Procurement Manager, Aurivo Agribusiness**



# WHAT TO LOOK FOR IN AN ENERGY PARTNER

## TRACK RECORD & RELIABILITY

A partner with a trusted legacy of 90 years in Ireland

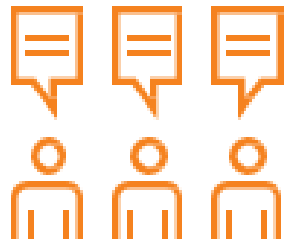
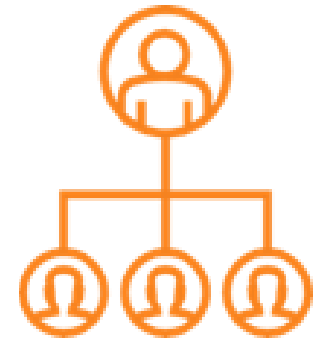


## FINANCING

Freedom from capital investment

## CUSTOMER SUPPORT NETWORK

Multinational, multi-site support capability



## BEST-IN-CLASS EXPERTISE

In-depth knowledge of Energy Management, New Technologies and International Consulting

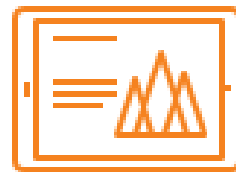


## INDEPENDENCE

Providing systems integration that is technology agnostic

## CUSTOMISED SOLUTIONS

Cutting-edge technology to develop the best possible solution for your organisation



## GUARANTEED SAVINGS

Increased efficiency & reduced costs

**LETS WORK TOGETHER**

**START TO UNLOCK THE FUTURE TODAY**

Lets talk about how we can work together

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generations