SMART AGRIFOOD TECH FOR SUSTAINABLE DEVELOPMENT GOALS

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THE CUBE
OUR MISSION

"The CUBE is a Midlands-based national centre of excellence focussed on facilitating economic growth, innovation and education in the Low Carbon and Renewables industry”

OUR VISION

"Creating a globally attractive location for the establishment of sustainable focussed business, through a world class cluster of skilled personnel, sustainable innovation development, design and infrastructural capabilities that will provide regional competitive advantage in the Low Carbon economy of the future"
The CUBE Low Carbon Centre Of Excellence

Irish Govt. committing 30 billion investment for transition to low carbon economy

€1 euro for every €5 spent under national development plan will be on sustainability

National outlook

$27 trillion dollar industry
Globally by 2030

Sectoral Focus

- Electricity
- Built Environment
- Transport
- Enterprises Services
- Circular Economy
- Agriculture
Business/corporates
- MNC
- SME
- FDI
- HPSU
- FUNDING

Community
- Regional Parity
- Economic growth
- Quality of Life
- Job Creation
- Net Zero

Research/3rd level
- Licensing
- Knowledge transfer
- Commercialisation
- Incubation
- (Pre) Accelerator
- PHD - HCI
Areas of Focus

- Waste/Circular Economy
- Agriculture
- Electricity
- Built Environment
- Transport

The CUBE Low Carbon Centre Of Excellence
Our Approach

**Human Capital**
Transform the skillset of talent pool to take advantage of Green collar industry

**Innovation**
HPSU development and large scale adoption of Low-Carbon technology throughout midlands Industry

**Communities**
Create Community buy in and benefit through prosumer activity

**Funding/Finance**
Provision of support in the confidential fundraising of projects

**Services to Midlands industry**
Access to a network of facilities, research, and thought leaders.

**Foreign Direct Investment**
Support and facilitate the attraction of FDI to Ireland in the Low Carbon/Renewables market.
“The future resilience of Irish jobs and enterprise will be determined by the approach we take.”

“The prospects for our children will be shaped by our success, societies who delay the transition needed will face higher costs and fewer opportunities”

Climate Action Plan 2020
Agrifood and the IoT
IoT: Its utility is undeniable

- IoT enables companies to automate processes
- reduce labour costs
- cuts down on waste
- improves service delivery, making it less expensive to manufacture and deliver goods
- as well as offering transparency into customer transactions and customer supply chains.

The Covid-19 Pandemic - Prime example:
Sensor patient monitoring, Contract tracing, Monitoring/delivering medicine, Remote working

BUT... it needs to be done responsibly...
we must consider its environmental impact:

- Manufacturing  
- Installation  
- Energy Consumption  
- Disposal

Answer = Lean, efficient and durable devices

- Just the right amount of resource for the job
- lower operational impact - updates
- longer lasting hardware
IOT and AgriFood

IoT is driving growth in the Farming industry globally
GDP in Agriculture reaching 804 million in the 1st Qtr 22 --
Critical for Ireland to advance

How does it aid the industry?

Allows you to measure vast datasets remotely and present this data to
the farm in real-time

- Soil Moisture • Chemical application • Water levels/use
- Livestock and plant health

Benefits:
Allows operators to track performance, make better more informed
decisions and crucially increase productivity and yield quicker and more
cost effectively

"In Essence it puts data behind the natural and inherent intuition of the farmer"
Research the salient issues facing the regions Agrifood industry

Linking innovation and solution providers to these issues

On-Farm technology trialing - partnering with technology providers

The Cube in conjunction with BloomHq were recently awarded funding under the recent Smart Agri Hubs call

**Remit:** Increase the competitiveness of the farming industry in the region through technology adoption

- Research the salient issues facing the regions Agrifood industry
- Linking innovation and solution providers to these issues
- On-Farm technology trialing - partnering with technology providers

**Goal:** Trial and test on farm input of technology and IoT and in doing so support the regions AgriFood community to become technology enabled and to bring the region to the forefront of the industry, creating a sustainable future
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