

# Foresight 2030: agriculture on the cusp of profound change

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# Outline

- Key messages
- Challenges and opportunities
- Farmers and processors of the future
- Innovation
- Teagasc's role
- Axes of innovation support
- Priority actions
- A final thought

# Key messages – Teagasc Foresight 2030

- Agriculture is on the cusp of profound change
- Immense challenges and opportunities but a positive future
- Focus on the ‘knowledge-based bio-economy’
- Teagasc’s role – science-based innovation support requiring *Partnership, Leadership & Accountability*
- Connecting with our stakeholders – 10 priority actions for the next while ...

# Challenges

- Food security
- Energy security
- Climate change
- Sustainability
- Motivating the next generation
- Market & policy change
- Low technological absorption capacity
- Processing capacity
- Globalization

# Opportunities

- Growing markets
- Good incomes & lifestyle
- Comparative advantage in grass
- Abolition of quotas
- Bio-economy potential
- Functional foods
- Recreational value of natural resources
- Exploitation of new technology

# Farmers of the future

- Business focused
- Sustainable
- Highly educated
- Knowledge intensive
- Open to new models of doing business
- Ability to cope with risk
- Producers of food, feed and bio-products
- Overseas investment

# Processors of the future

- Knowledge intensive
- Sustainable
- Highly skilled
- More concentrated
- Greater production of local and artisan products
- Functional foods
- Bio-products & services

# The bio-economy – a key sector in future national prosperity

- Bio-economy exports €14.3 billion (10.7% GNP) *and growing ...*
- Driven by indigenous raw materials & knowledge base
- GNP contribution *per 100 €* of exports ...
  - ✓ Bio-economy (*incl. agri-food*) = €48
  - ✓ Non-bio-economy = €19

# Innovation drives prosperity

**Profitability/Competitiveness =**

**Productivity X Relative prices**

**= f (Useable knowledge = innovation)**

# ‘Innovation is about new-ideas adding-value ...’

## Research

Converts €s to knowledge

Produce knowledge

*e.g. Den 1% of need*

Publish or perish

Do it yourself (authorship)

Just in case

Discipline and curiosity  
driven

## Innovation

Converts knowledge to €s

Access knowledge

*e.g. Den 99% of need*

Demo or die

Get it done (strategic)

Just in time

Multi-disciplinary, agnostic  
and problem oriented

# Teagasc Mission

*“To support science-based innovation in the agri-food sector and the wider bio-economy that will underpin profitability, competitiveness and sustainability” ...*

# Teagasc vision

*“To be internationally recognized for providing excellent science-based innovation support for the agri-food sector and the wider bio-economy” ...*

# Teagasc goal

*“To help build sustainable rural communities” ...*

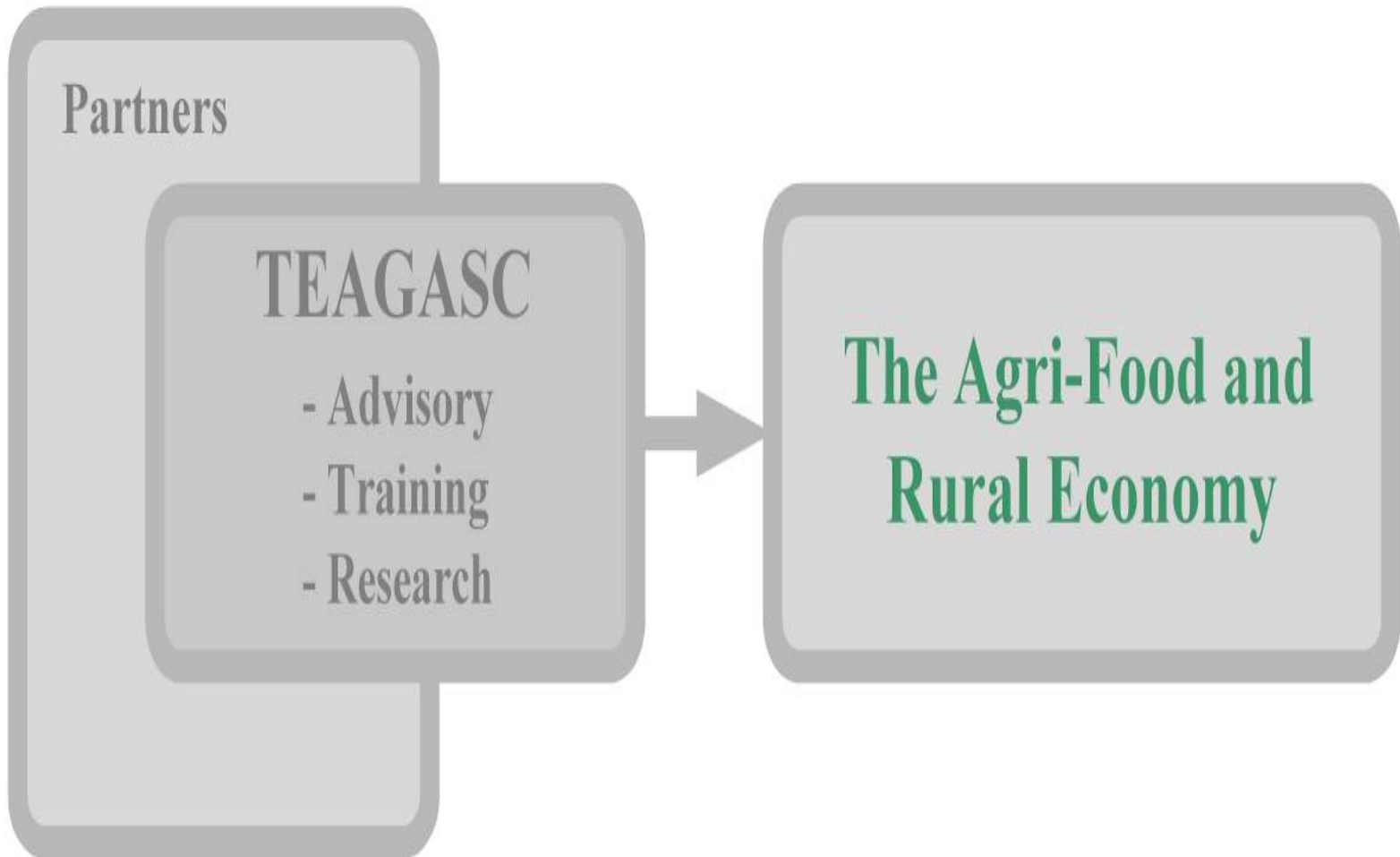
# Uniqueness of Teagasc as a knowledge provider

- One institution combines
  - ✓ *knowledge creation (research)*
  - ✓ *knowledge transfer (advisory)*
  - ✓ *knowledge absorption (education & training)*
- High level of resources devoted to *knowledge transfer*
- Focus on transfer of *useable knowledge*

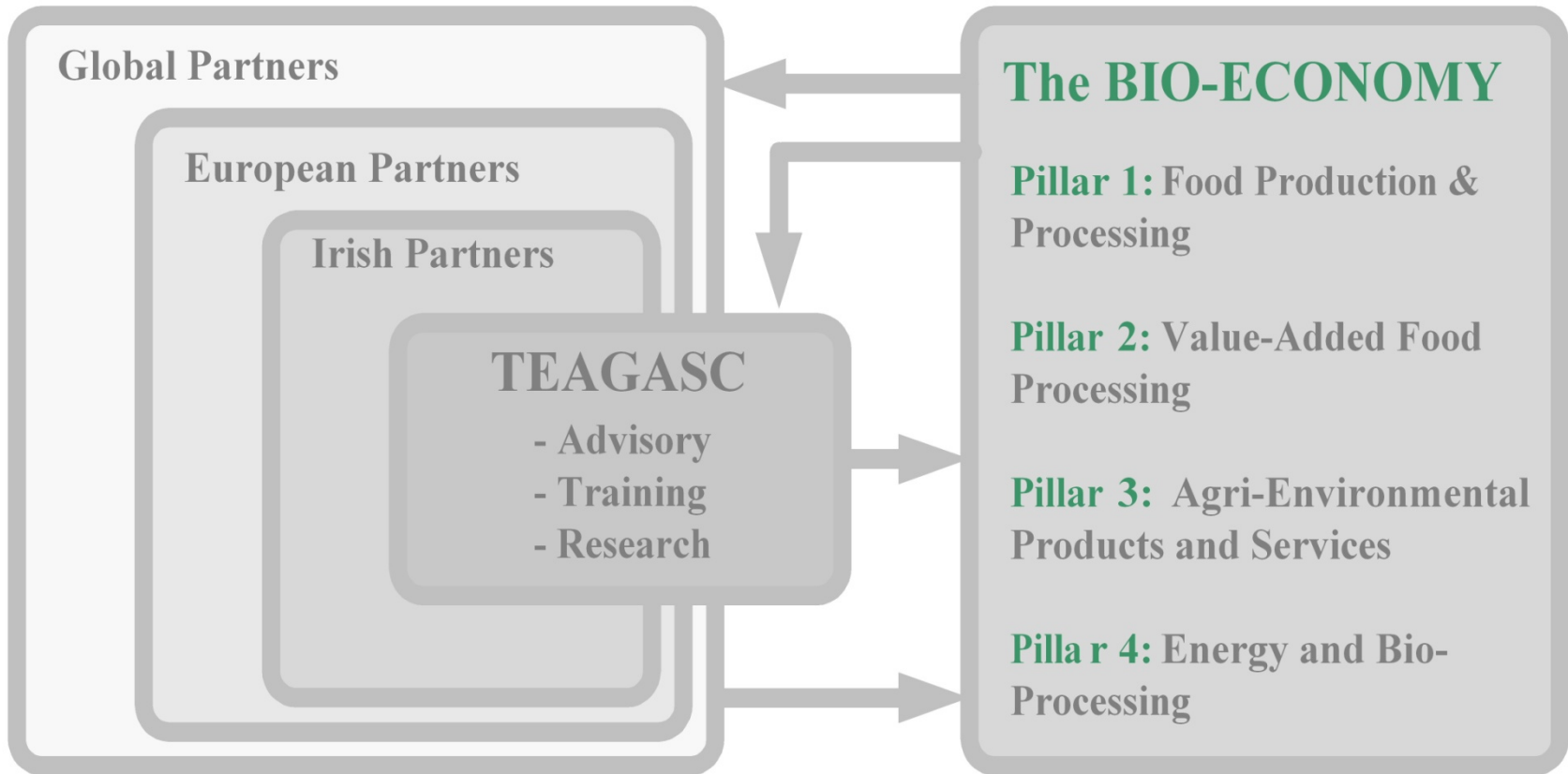
# Teagasc – a key player in Ireland's knowledge economy

- 7% of R&D spend
- 200+ research
- 300+ advisory
- 60+ educationalists
- 333 undergraduates
- 175 4<sup>th</sup> level (Ph.d.) students
- 100+ locations

# The traditional 'knowledge-transfer' system – 'Gatekeeper' model



# The future 'knowledge transfer' system – 'Open-innovation' model



# Realising the vision - axes of innovation support

- ***Partnership ...***
- ***Leadership ...***
- ***Accountability ...***

# Ten priority actions

- Better integration
- Enhance stakeholder involvement
- Initiative in *Grassland Research and Innovation*

# Priority actions contd.

- Invest more resources in sustainable farming and bio-crop production
- Exploit benefits of substantial investment in biosciences
- Bed down re-structured advisory service
- Provide a leadership role in the context of an expansion in milk production

# Priority actions contd.

- Leadership in functional foods
- A new *Food-SME 'Knowledge-Transfer' Service*
- Enhance the quality of the educational experience at our colleges and develop high-quality and relevant new programme initiatives with partners in third-level education
- A final message ...

‘Knowledge is the lever of riches’

