

Bespoke Market Intelligence for Science and Technology

Mark Howitt CGE Project Manager

17th January 2013

Workshop on Advanced Computing for Accelerators Funding Possibilities

CONTENTS





17th January 2013

2

1. INVENTYA



Overview

- An International Science, Engineering and Technology Commercialisation Consultancy
- Founded in 2006
- 15 full time staff with different technical backgrounds
- 6 offices 3 in UK, Italy, France and Belgium

Key strengths

- Technology Expertise
- Research Excellence
- Funding Know-how
- Global Outlook

Key clients

- Businesses: From Blue chip to SMEs
- Investors: Venture funders, private investors, corporate investors and finance providers
- Research Organisations: Universities, Research Councils, and research centres

17th January 2013

Commercial in Confidence © Copyright Inventya Limited 2013

2. OUR SERVICES

Research

- Market Research
- Market Due Diligence
- Export Market Research

Strategy Development

- Proof of Market / Proof of Concept / Feasibility Studies
- Commercialisation and Go to Market Strategies
- Strategic Management Advice, Mentoring & Strategic Implementation Plans
- Start-Up Advice and Mentoring
- Business Growth Strategy Formulation
- Marketing advice and mentoring

Implementation

- Business Development & Business Planning
- IP / Technology Commercialisation
- Funding identification
- Funding application, assistance and guidance
- Commercial lead generation

17th January 2013

Commercial in Confidence © Copyright Inventya Limited 2013

3. EXAMPLE CURRENT PROJECTS



1	ionne About News and Events Bealmers Doctoreal Projects Constact
	Ministerio de la dela del composition de la
	Now open for applications from interested businesses The clean to balance and a constance and an effect of the second sec
	Register interest now for bouises support 4. and the water state root from constraining of 2. Simply on Annotation and Annotation and Annotation and Annotational Annotation 4. Simply on the Annotation and Annotation and Annotational Annotational Annotation Regions and Annotation and Annotation and Annotation and Annotational Annotation Region and Annotation and Annotation and Annotation and Annotational Annotation and Annotational Annotation and Annotational Annotation and Annotational Annotation and Annotation and Annotational Annotational Annotation and Annotational Annotation and Annotation and Annotation and Annotational Annotation and Annotational Annotation and Annotation and Annotational Annotation and Annotational Annotation and Annotational Annotational Annotation and Annotational Annot
	88D or product development support required? • Instances #30: • Catacitations with the constant select Constructions and the constant select of instances and an understanding and the UC Madeg wave instances. We and the support of a under of 5 function parameters with instances and the understanding set of the UC Madeg wave instances. We are offer any selection of the set of the UC madeg parameters and end of the UC madeg wave instances. The set of the set of the set of the set of the UC madeg parameters and the set of the Set of the UC madeg wave instances. The set of t
	What is Eco-Innovation? The averagement forward preserve preserve preserve are provide and the provide autometer that was well active a spectram accusa in environmental impact. The use of a spectram accusa with these exotivates applicable.
ι	atest News
F. M	inst fifty businesses announced in £9.8m eco innovation centre b suments was extended son't tensivy vitroritor rearches and galaxies previoumental, field, policita and anno in a dad ner visient aero.
5 8 3	o long term research projects confirmed in ensure notion, inset PC meson paper have been andrees. Florest y hough the Carest to Galas (Io-monitory prime parentae) in a long term of the space of the data of the standard standard to Galaxies. These researches all data gard the space of the careformers). Consety of comparison balance paper payment of distances wavec. Matan
1 2 2 2	ice Chancellor to welcome innovative businesses to Lancaster researchiness(s) via Oberatoria i advance barrow of second beneral and readin raid reaginess to act to accord even up missions barrow from any supportain a surveyor reading and many set PO wave to apprecia from other or port from Sacromess and POacy of Sacras & Tudnogo. Matter

The Centre for Global Ecoinnovation

a £9.8 million ERDF project with Lancaster and Liverpool Universities designed to support 285 SMEs

```
AAL
                                 ne Mobility Motivato
MOR MOTIVATO
```

Mobility Motivator

a €4.0 million EC project led by Université de Versailles to and develop an engaging environment for promoting mobility and cognitive skills amongst elderly



AKTIVE

a £2.1 million TSB project with Tunstall and Leeds and Oxford Universities to develop a knowledge base for UK Assisted Living Technology manufacturers

17th January 2013

Commercial in Confidence © Copyright Inventya Limited 2013

4. COLLABORATING WITH SMES FOR INNOVATION

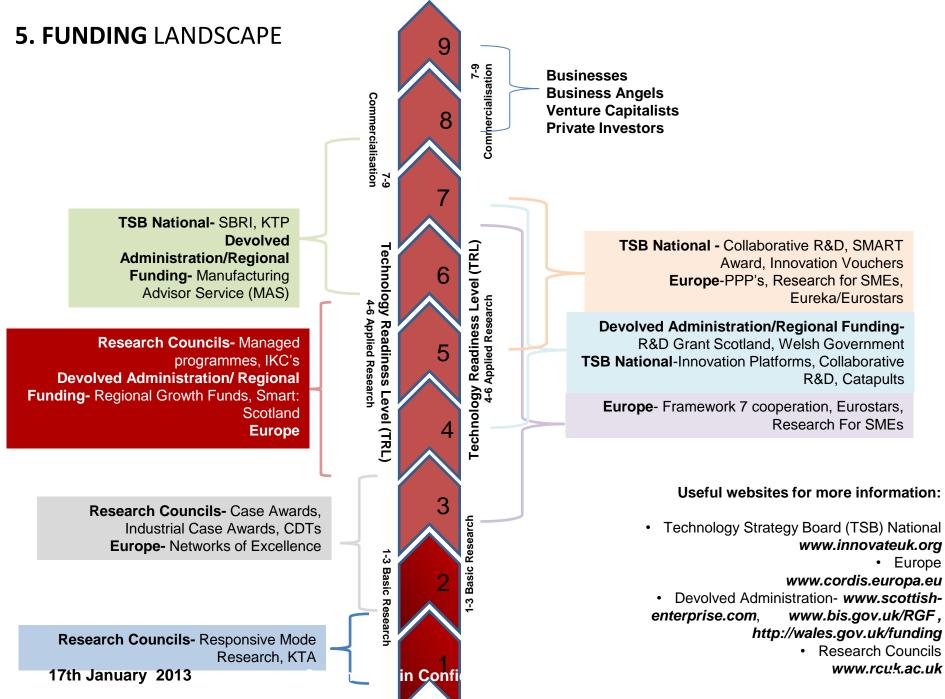


Why collaborate with SMEs

- SMEs are the motors of European economy (23 million SMEs in Europe)
- 85% of total employment growth attributed to SMEs
- SMES are a key focus for government and EU support
- SMEs need to innovate and access the results of R&D projects
- Universities need funding and routes to market for research
- Collaboration through EU or TSB or other funding schemes enable both parties to achieve their aims

Funding mechanisms

- EU FP7 and Horizon 2020 funding
- TSB collaborative
- Eurostars SME focused, universities as subcontractors
- TSB Smart SME focused, Universities subcontractors
- KTP
- Research councils
- Innovation vouchers
- Other schemes and project e.g. ERDF such as CGE facilitate collaboration



Source: Sue Dunkerton, HealthTech and Medicines KTN

6. EUROPEAN STRATEGY

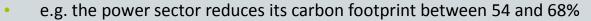


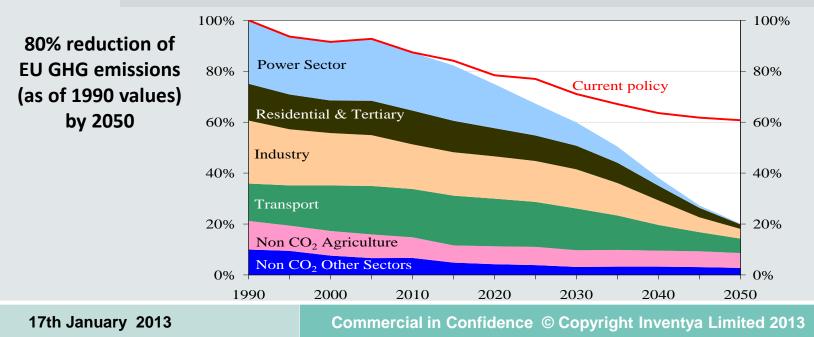
Strategy Development

- 2020 Smart, Sustainable and inclusive Growth
 - Confirmation of three 20% targets

2050 A Roadmap for moving to a competitive low carbon economy

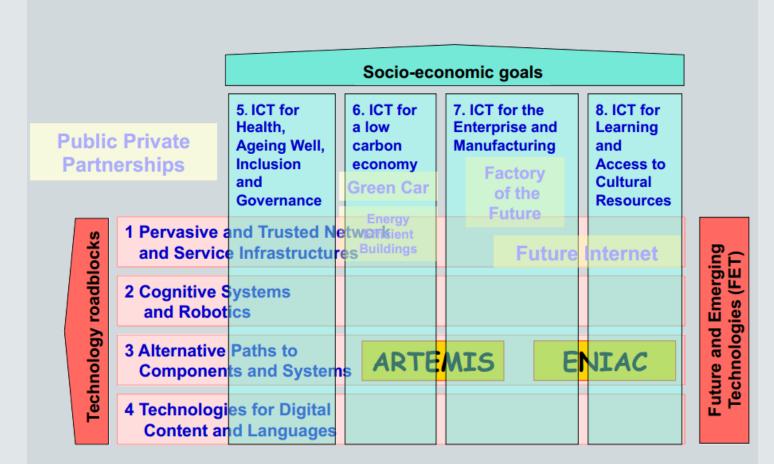
- http://ec.europa.eu/clima/policies/roadmap/index_en.htm
- Reducing GHG emissions by 80-95% by 2050 compared to 1990; a fully decarbonised Power Sector
- 2030 Intermediate targets:





7. FP7 ICT AREAS OF RESEARCH 2011-2012





Source: http://www.ictic.org

17th January 2013

8. ICT CALL FOR PROPOSALS 11



ICT Call for Proposals 11

- Call identifier: FP7-ICT-2013-11
- Date of publication: 18 September 2012
- Deadline: 16 April 2013, at 17:00.00 Brussels local time
- Indicative budget: EUR 236.5 million

Challenge 1: Pervasive and Trusted Network and Service Infrastructures

- 1.1: Future Networks
 Call 11
- 1.2: Software Engineering, Services and Cloud Computing
- 1.3: Digital Enterprise
- 1.4: A reliable, smart and secure Internet of things for Smart Cities
- 1.5: trustworthy ICT
- 1.6: Connected and Social Media
- 1.7: Future Internet research Experimentation (FIRE)
- 1.8: Expansion of use Cases
- 1.9: Technology Foundation Extension and Usage

More information available from:

http://ec.europa.eu/research/participants/portal/page/call_FP7?callIdentifier=FP7-ICT-2013-11&specificProgram=COOPERATION#wlp_call_FP7

17th January 2013

Commercial in Confidence © Copyright Inventya Limited 2013 10

9. ICT CALL FOR PROPOSALS 11



Challenge	Objectives	Funding schemes
Challenge 1: Pervasive and Trusted Network and Service Infrastructures	ICT-2013.1.1 Future Networks	IP/STREP, CSA
Challenge 3: Alternative Paths to Components and Systems	ICT-2013.3.1 Nanoelectronics	STREP, CSA (SA only)
	ICT-2013.3.2 Photonics	IP, STREP, CSA, ERANET Plus
Challenge 4: Technologies for Digital Content and Languages	ICT-2013.4.2 Scalable data analytics	IP/STREP, CSA
Challenge 6: ICT for a Low Carbon Economy	ICT-2013.6.1 Smart Energy Grids	STREP
	ICT-2013.6.3 ICT for water resources management	STREP
Challenge 8: ICT for learning and Access to Cultural resources	ICT-2013.8.2 Technology- enhanced learning	IP/STREP, CP- CSA, CSA
Future and Emerging Technologies	ICT-2013.9.9 FET Flagship Initiatives (b)	CSA

17th January 2013

10. EXAMPLE - FUTUTRE NETWORKS



Target Outcomes

- A) Next generation heterogeneous wireless and mobile broadband systems, based on flexible spectrum usage and reduced EMF and interference. (IP, STREP)
- B) High throughput low-latency infrastructures, based on dynamic all-optical networks and hybrid wireless and cable networks. (IP, STREP)
- C) Internet architectures enabling innovation in network virtualization, specifically through programmability of network functions and protocols. (IP, STREP)
- D) Tighter integration of satellite and terrestrial communications technologies, as a critical infrastructure, in particular for public safety/security applications. (IP, STREP)
- E) Coordination and support actions for (re)structuring the research effort in the sector. (CSA)
- Targets a, b, c, d
 - IP/STREP: EUR 46.5 million, of which a minimum of 50% to IPs and 30% to STREPs
- Target e
 - CSA: EUR 2 million

11. EXAMPLE - FUTUTRE NETWORKS



Expected Impact

- Developing key enabling technologies for the future generations of the European highspeed broadband and mobile network infrastructure (factor of 10 overall capacity increase, plus factor of 10 radio efficiency increase).
- Improved flexibility and economic, spectral and energy efficiency of access/transport infrastructures (factor of 4 reduction in watts/bit).
- Strengthened positioning of European industry in the fields of Future Internet technologies, mobile and wireless broadband systems, optical networks, and network management technologies.
- Contributions to standards and regulation as well as the related IPR.
- Adoption by network operators of integrated all-optical networks and of spectrum flexible broadband wireless systems (by 2020).

More information available from: <u>http://ec.europa.eu/research/participants/portal/download?docId=32767</u>

12. TECHNOLOGY STRATEGY BOARD -TECHNOLOGY – INSPIRED INNOVATION FUNDING CALL

Expected Impact

- The Technology Strategy Board is to invest up to £10m in fast-track and collaborative research and development projects that stimulate innovation across the key enabling technology areas of advanced materials, biosciences, electronics, sensors and photonics and information and communications technology
- Competition is now open and deadline for registering express of interest is 23rd January 2013

Technology Strategy Board



Technology-inspired innovation

COMPETITION FOR PAST-TRACK AND COLLABORATIVE RED FUNDING DECEMBER 2012





13. OTHER UK GOVERNMENT SCHEMES



UKTI

- Passport to Export
- Export Marketing Research Scheme
- Overseas Market Introduction Service
- Gateway to Global Growth
- UKTI Venture Capital Team

Other

- £300m Enterprise Capital Funds (ECF) programme
- UK Innovation Investment Fund
- UK Future Technologies Fund (UKFTF)
- £50m Business Angel co-investment Fund

Fiscal Measures

- R&D tax credit for SMEs increased the level of super-deduction relief available to 225%
- Patent Box 10% rate of corporation tax on profits from patents/IP
- 24% Corporate Tax Rate

14. HORIZON 2020

- <u>Biggest funding pot in EU for Research and Development</u>
- Commission proposal for a 80 billion euro research and innovation funding programme (2014-20)
- Part of proposals for next EU budget, complementing Structural Funds, education, etc.
- A core part of Europe 2020, Innovation Union & European Research Area:
 - Responding to the economic crisis to invest in future jobs and growth
 - Addressing peoples' concerns about their livelihoods, safety and environment.
 - Strengthening Europe's global position in research, innovation and technology

15. HORIZON 2020



Overview

- A single programme bringing together three separate programmes/initiatives*
- Coupling research to innovation from research to retail, all forms of innovation
- Focus on societal challenges facing EU society, e.g. health, clean energy and transport
- **Simplified access**, for all companies, universities, open to institutes in all EU countries, associated countries and beyond.

Simplification

- Single set of simpler and more coherent participation rules.
- New balance between trust and control.
- Moving from multiple **funding rates** for different beneficiaries and activities to just two.
- Replacing the four methods to calculate overhead or "indirect costs" with a single flat rate.
- Major simplification under the **forthcoming financial regulation**
- Successful applicants to get working on projects more quickly

16. HORIZON 2020 - THREE PRIORITIES



1 Excellent science

- World class science is the foundation of tomorrow's technologies, jobs and wellbeing
- Europe needs to develop, attract and retain research talent
- Researchers need access to the best infrastructures

2 Industrial leadership

- Strategic investments in key technologies (e.g. advanced manufacturing, microelectronics) underpin innovation across existing and emerging sectors
- Europe needs to attract more private investment in research and innovation
- Europe needs more innovative SMEs to create growth and jobs

3 Societal challenges

- Concerns of citizens and society/EU policy objectives (climate, environment, energy, transport etc) cannot be achieved without innovation
- Breakthrough solutions come from multi-disciplinary collaborations, including social sciences & humanities
- Promising solutions need to be tested, demonstrated and scaled up

17. HORIZON 2020 – NEXT STEPS



From 30/11:	Parliament and Council negotiations on the basis of the Commission proposals
Ongoing:	Parliament and Council negotiations on EU budget
	2014-20 (including overall budget for Horizon 2020)
Mid 2012:	Final calls under 7th Framework Programme for Research to bridge gap towards Horizon 2020
Mid 2013:	Adoption of legislative acts by Parliament and Council on Horizon 2020
1/1/2014:	Horizon 2020 starts; launch of first calls

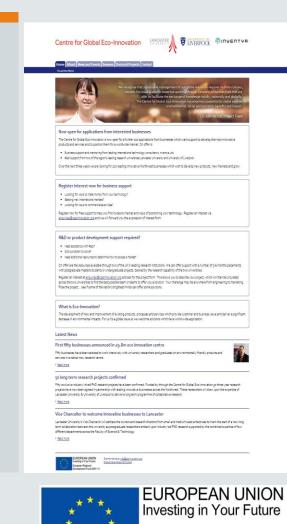
18. Centre for Global Eco-Innovation

<u>्र</u>ि । ⊓ ∿ E ⊓ T भ म_`

- For SMEs in the North West
- Eco-innovative products, processes or services
- Any technology that has beneficial environmental impact
 - Apps, databases and IT systems
 - Crop enhancement
 - Environmentally friendly chemicals and processes
 - Low carbon vehicles and buildings
 - Use of recycled materials
 - Renewable energy
 - Resource usage reduction
- Deliverables: GVA and employment increases, environmental benefits

- Free & subsidised R&D
- Free commercialisation support: taking to (new) markets
- Now recruiting SMEs to benefit

ð



European Regional Development Fund 2007-13

17th January 2013

LANCASTER

Commercial in Confidence © Copyright Inventya Limited 2013

20

19. INNOVATION PANEL



INVENTYR

- Proprietary Innovation Panel to support the market assessment of innovation
- Inventya has over 25,000 contacts
- By registering a profile, help identify the right expert for collaboration
- Invited to participate in collaborative R&D projects
- Register on:
 www.innovationpanel.com

Innovation Panel



A network of like-minded innovative decision-makers

- Be part of a leading international knowledge sharing science and innovation community
- * Members-only access to industry intelligence and analysis

E-Mail

Password

Forgot your password?

New? Sign up here

WELCOME TO THE INNOVATION PANEL

A network of world leading experts dedicated to innovation in science, engineering and technology.

The Innovation Panel is an exclusive international knowledge sharing science and innovation community. By being a member, you are able to shape the new wave of products but you also have the satisfaction of contributing to the development of potential life-changing innovation.

SHARE YOUR OPINION

By completing surveys from the Innovation Panel, you can influence corporate decisionmakers with real-world insights. You can login at your convenience, in your own time, whenever and wherever you are able to.

EXCLUSIVE ACCESS TO OPPORTUNITIES:

By creating a profile with the innovation Panel, you will be able to receive tailored insights into opportunities for open-innovation and funded research and development. Stay informed on the latest funding opportunities, receive invitations to join technology funded projects and receive personalised knowledge updates to be on top of the latest innovations in your field.

EARN HONORARIA:

By getting involved, you can turn your unique industry insights into valuable rewards. For every survey you complete, you will be rewarded with points. These points could then be redeemed into gift vouchers, prepaid Debit Card or Charity Donation.

17th January 2013

Commercial in Confidence © Copyright Inventya Limited 2013 21



Bespoke Market Intelligence for Science and Technology

Mark Howitt Project Manager Centre for Global Eco-Innovation

☎ Tel: +44 (0)1925 607 192
 ⑦ Fax: +44 (0)1925 607 398
 ☎ Mob: +44 (0)7910 020 686
 ∞ Email: m.howitt@inventya.com

Inventya Limited, Vanguard House, Keckwick Lane, Daresbury, Cheshire WA4 2AB, UK Registered Office: 2nd Floor Hanover House, 30 Charlotte Street, Manchester M1 4EX, UK - Incorporated in England and Wales Tel: +44 (0) 1925 607190 - Fax: +44 (0) 1925 607398 Email: info@inventya.com - WEB: www.inventya.com Company registration number: 071144394 - VAT Registration number: GB 988 1596 51