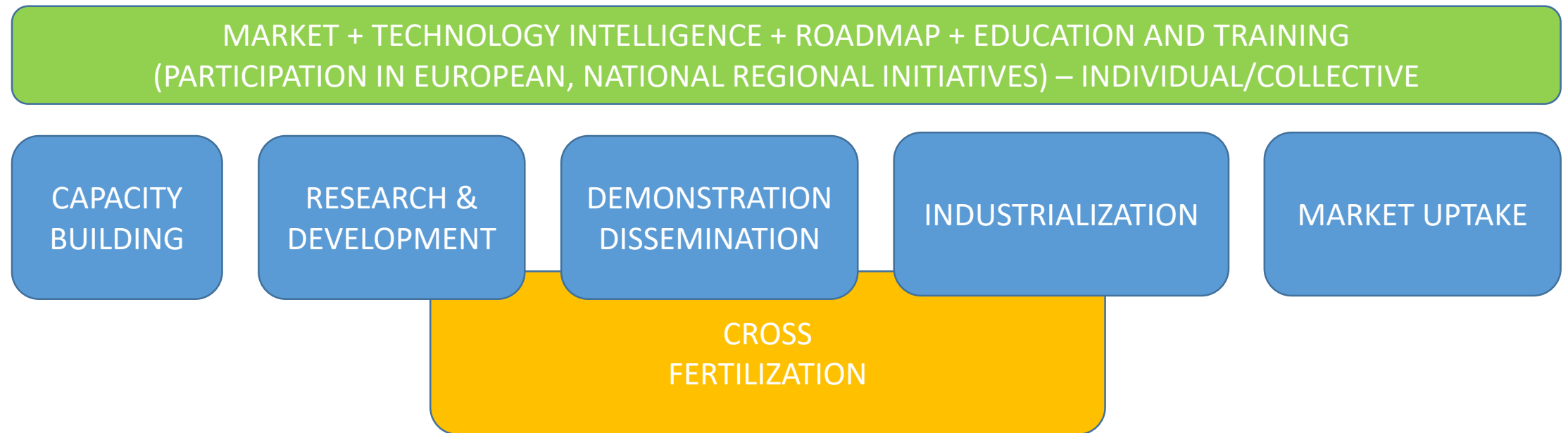# SYNERGIES WITH OTHER FUNDS
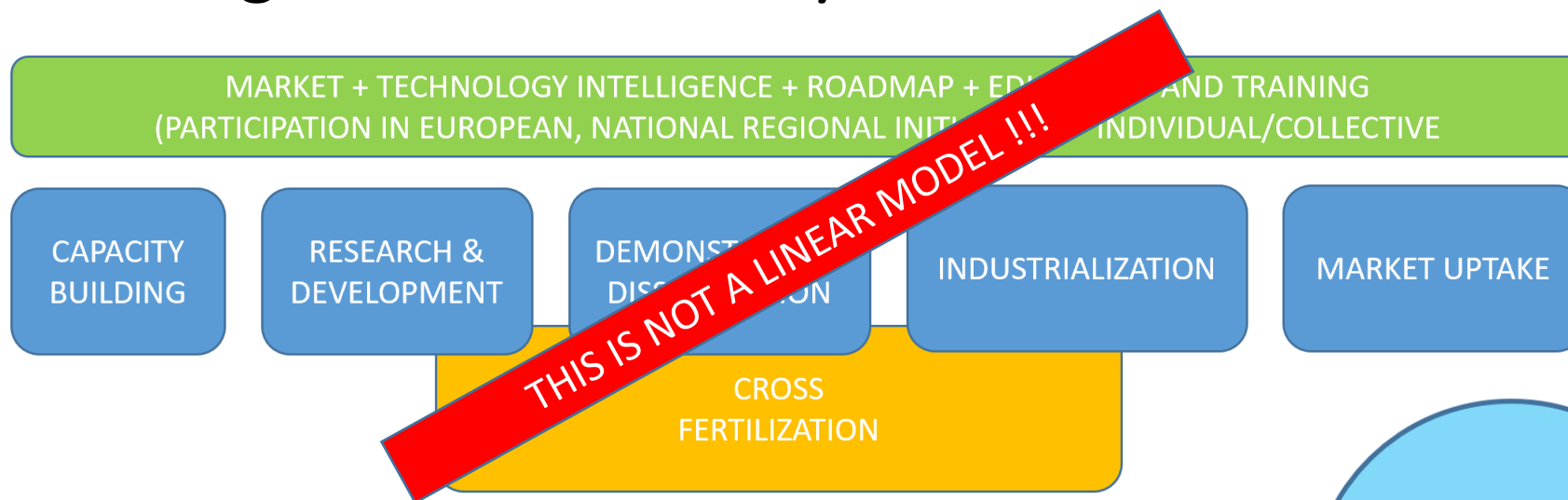
Covering the Innovation Cycle

José Carlos Caldeira

jose.caldeira@inesctec.pt

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Covering the Innovation Cycle

MARKET + TECHNOLOGY INTELLIGENCE + ROADMAP + EDUCATION AND TRAINING
(PARTICIPATION IN EUROPEAN, NATIONAL REGIONAL INITIATIVES) – INDIVIDUAL/COLLECTIVE

CAPACITY BUILDING

RESEARCH & DEVELOPMENT

DEMONSTRATION DISSEMINATION

INDUSTRIALIZATION

MARKET UPTAKE

CROSS FERTILIZATION

Covering the Innovation Cycle

MARKET + TECHNOLOGY INTELLIGENCE + ROADMAP + EDU... AND TRAINING
(PARTICIPATION IN EUROPEAN, NATIONAL REGIONAL INITI... INDIVIDUAL/COLLECTIVE

| CAPACITY BUILDING | RESEARCH & DEVELOPMENT | DEMONST... DISS... | INDUSTRIALIZATION | MARKET UPTAKE |

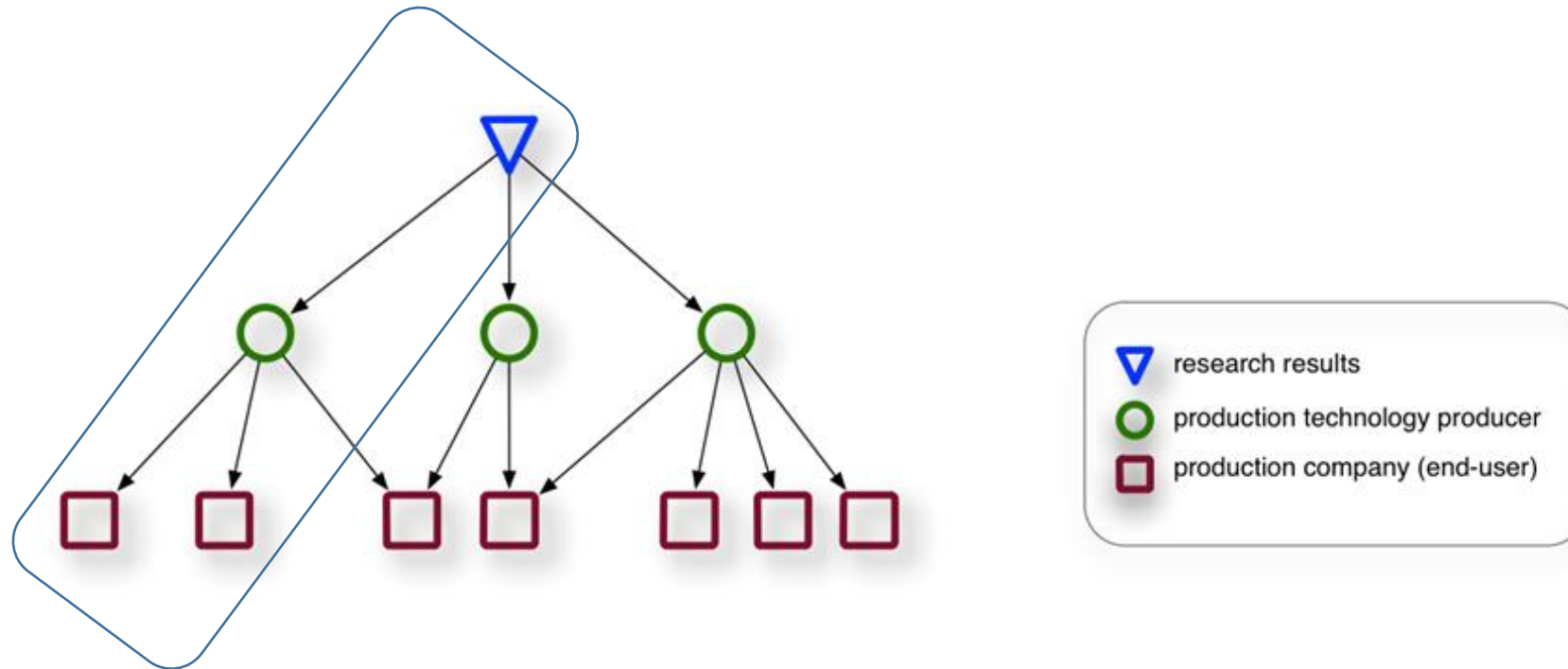CROSS FERTILIZATION

THIS IS NOT A LINEAR MODEL !!!

KC-Knowledge Creation (Pillar1)
KD-Knowledge Development & Exploitation (Pillar2)
KU-Knowledge Uptake (Pillar3)

KC   KD&E   KU
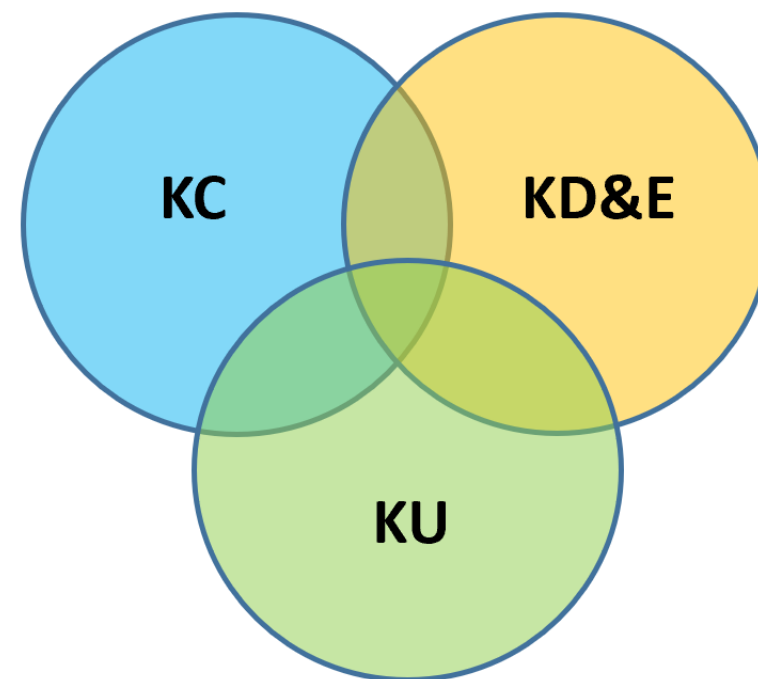
Source: MANUFUTURE VISION 2030

FROM RESEARCH TO COMMERCIAL EXPLOITATION
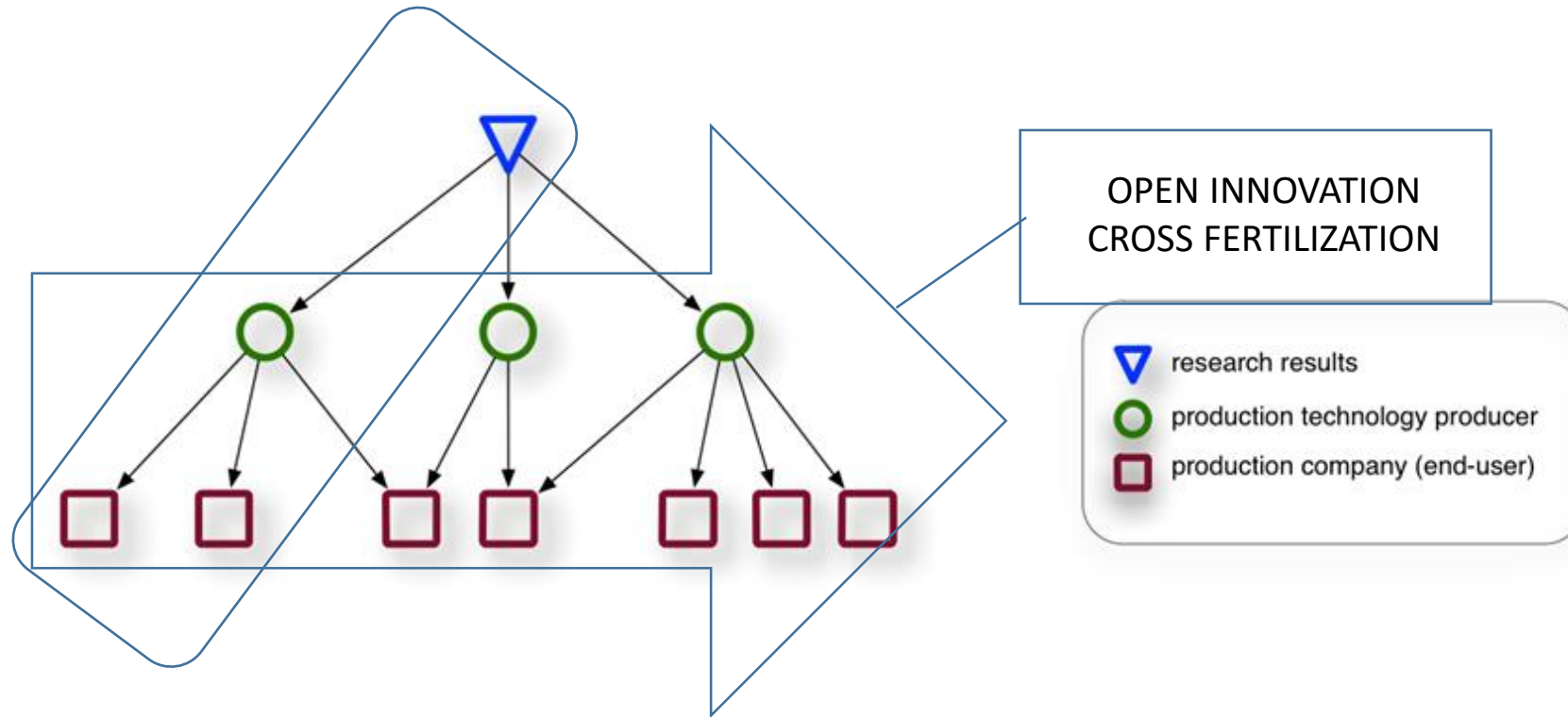
Covering the Innovation Cycle

**KEY ENABLING TECHNOLOGIES:
A VALUE CHAIN PYRAMID**

Covering the Innovation Cycle

OPEN INNOVATION
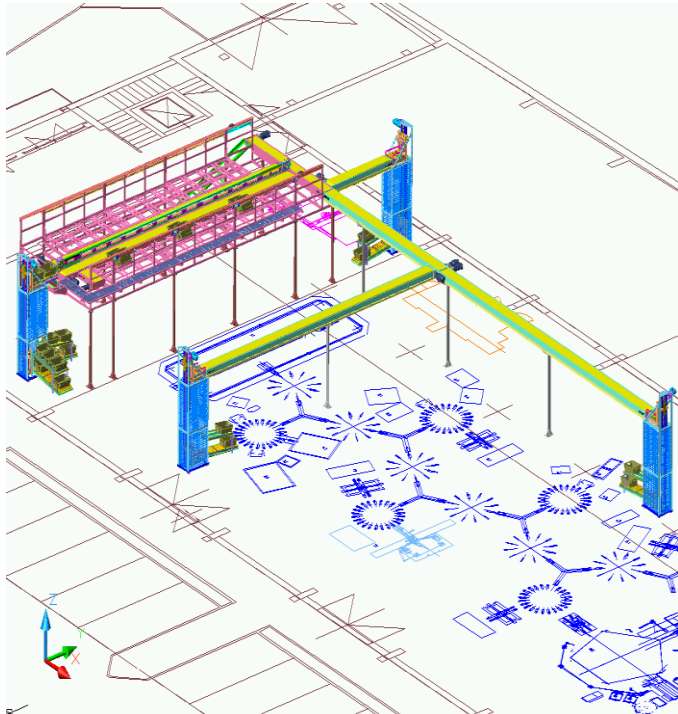CROSS FERTILIZATION

▽ research results
◯ production technology producer
▢ production company (end-user)

**KEY ENABLING TECHNOLOGIES:
A VALUE CHAIN PYRAMID**

H2020 AND NATIONAL FUNDING INSTRUMENTS

Capacity-Building	Basic Research	Applied R&I	DT/Prot./Dem/LP	Market

SAICT

SI Empresas – I&DT

SI Emp. – Inovação Empresarial

SI Emp. – Qualificação e Internacionalização

SIFIDE

SAICT/SI
Aviso – Inter.
Aviso - CoLabs

SIAC – Proj.Semente/TT/IP/Dem/ Dissemin. Proj. Europeus

Seal of Excellence – Demo projects

Eurostars II – SI – I&DT

ERC & Marie Curie

Research & Innovation projects

Widening

Innovation projects

EIC-Pathfinder

EIC-Transition Activities

EIC-Accelerator

Fast Track to Innovation

TRL 1 - 2   TRL 3 - 7   TRL 8 - 9

Work Done in the Past (aligning EU and NR)

Development of a Highly Flexible Logistic System for Customized Products

IPP Pilot Plant
Shoe Sector
Vigevano – Italy
Funded by National Funds

Cross Fertilization
Metalworking Sector (Company)
Demonstrator
Porto – Portugal
Funded with Structural Funds

Example 1: H2020 to National projects

Powerweave
www.powerweave.eu

development of textiles for electrical energy generation and storage

project coordinator: Ian Jones (ian.jones@twi.co.uk)

Objectives
Development of photovoltaic energy harvesting fibres and energy storage fibres (battery) integrated by weaving or knitting with control electronics into a textile.

Challenge
Development of a fabric that will generate and store electrical energy in its fibrous matrix.

Impact:
Large-area deformable products, including agricultural shading, automotive soft-tops, building facades, rollable shades, curtains and roofing, aerospace fabrics, and outdoor goods.

European Commission

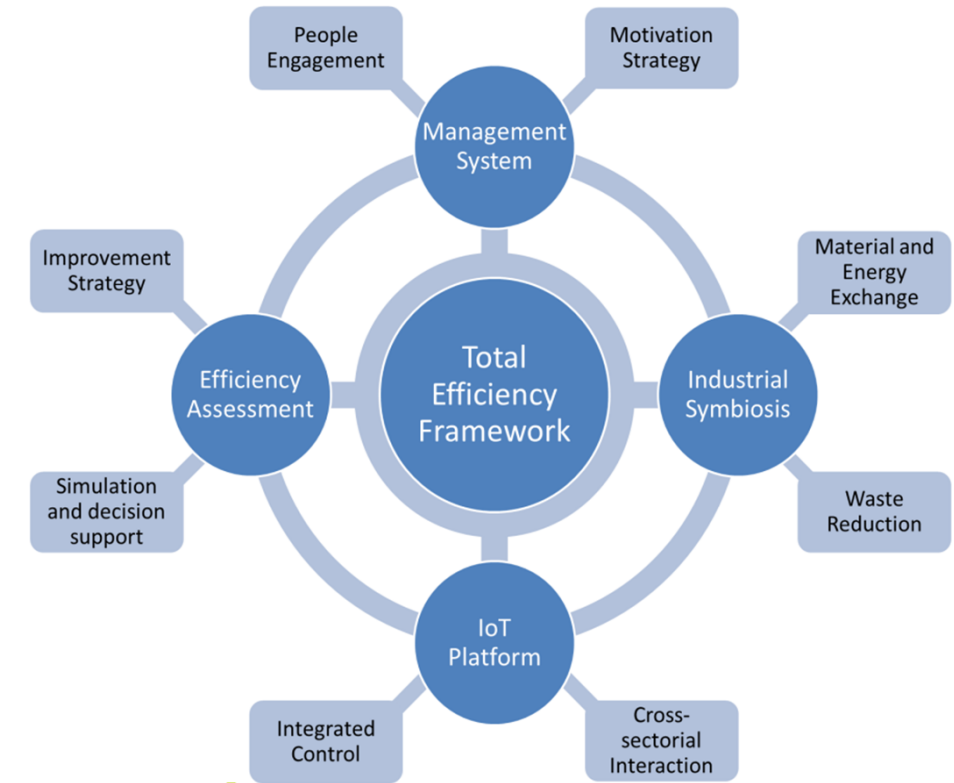# Example 1: Spillover into national projects
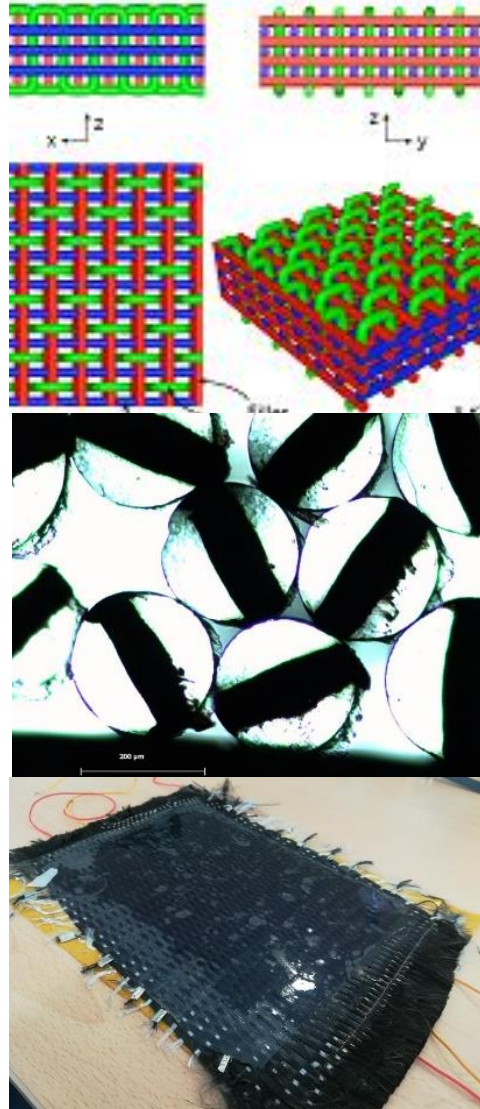
Mobilizador Project TexBoost is large structural project for the whole value chain of the Portuguese Textile Cluster: Technology and Fashion.

A spillover of project POWERWEAVE may identified by tasks in PPS3 of TEXBOOST, which aims to develop smart sensor-actuator tricomponent fibres, integrate the fibres into woven structures and subsequently integrate the sensing woven fabrics into a thermoset composite structure.

Partners of PPS3 are Simoldes Plásticos SA, TMG SA, INEGI, CITEVE and CENTI.

Example 2: H2020 to National projects

- **Project Name:** MAESTRI - Total Resource and Energy Efficiency Management System for Process Industries (2015-2019)

- **H2020 Process Industries based project (Call SPIRE 06-2015)** lead by ISQ, focused on Resource Efficiency, Industry 4.0 enabler via IoT Platform, Lean Management and Industrial Symbiosis.

- **MAESTRI origins began with a QREN Portuguese R&D Cluster Project – PRODUTECH PSI – PPS5 Eco-Efficiency**. ISQ and INEGI endeavor to further develop the conceptual results in a H2020 project

Example 2: Spillover into national projects

- **Project Name: P2020 CoCereal Value** (2018>2021)

- **Focus on circular economy,** by assessing namely the wheat residues and co-products, in order to be valued by means of Industrial Symbiosis and the Efficiency Framework.

- **INEGI is partner, Silos de Leixões the lead partner, Germen and U Católica, partners. UCAMBRIGDE is external stakeholder in the Advisory Board.**

- **Application of Efficiency Framework, MSM for waste hot-spots detection/quantification; new INEGI's framework "Hot-Cold Spots Assessment" and UCAM based T4IS framework**

- **New Industrial Symbiosis Case Study for cereal subproducts and residues**
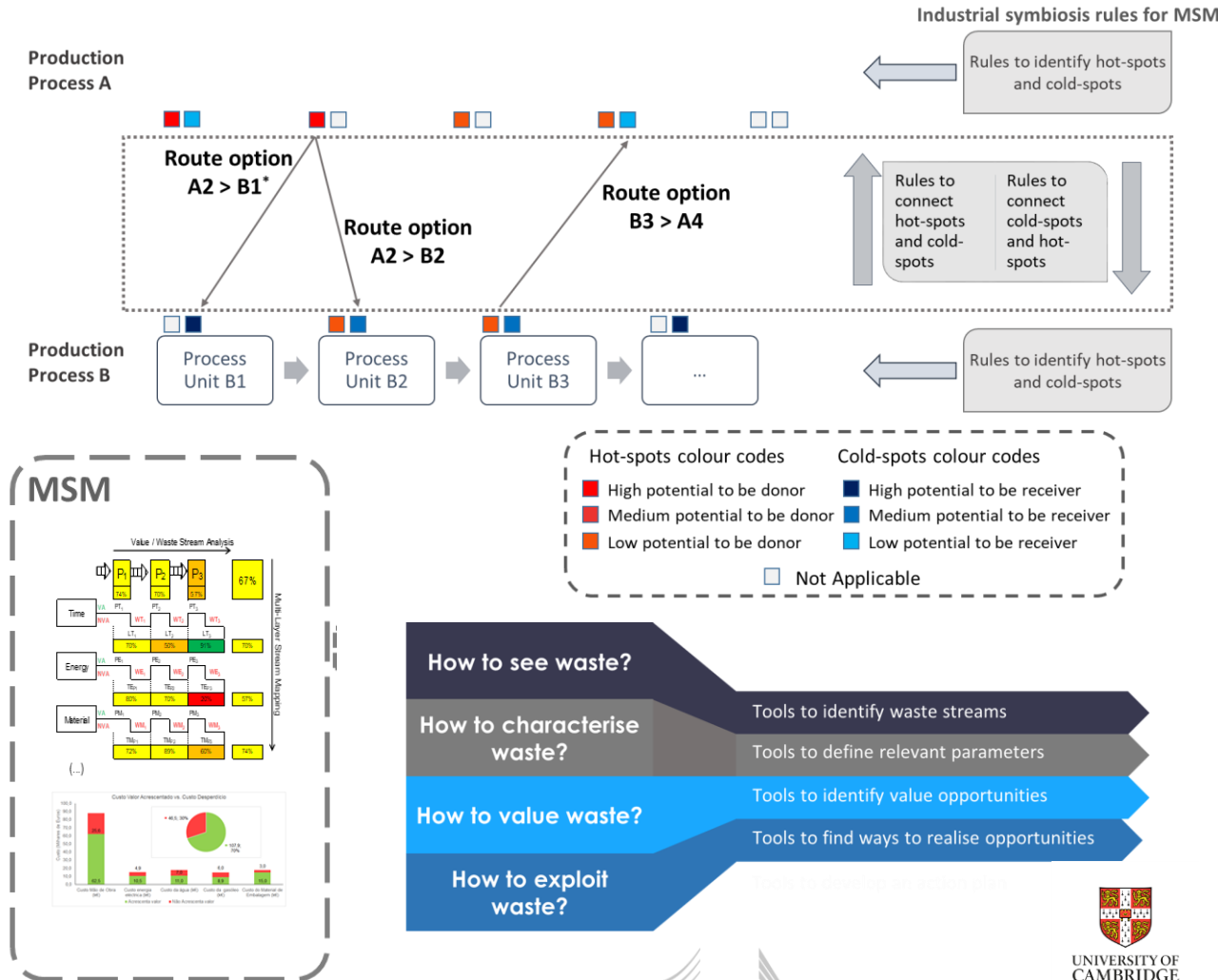
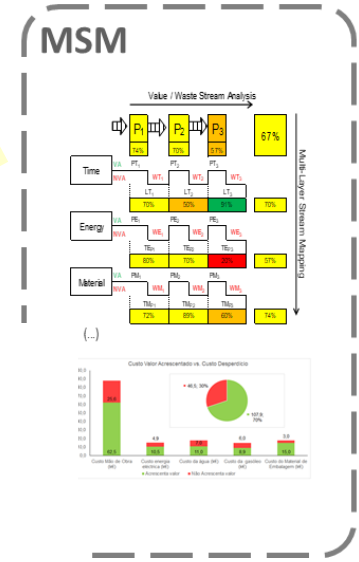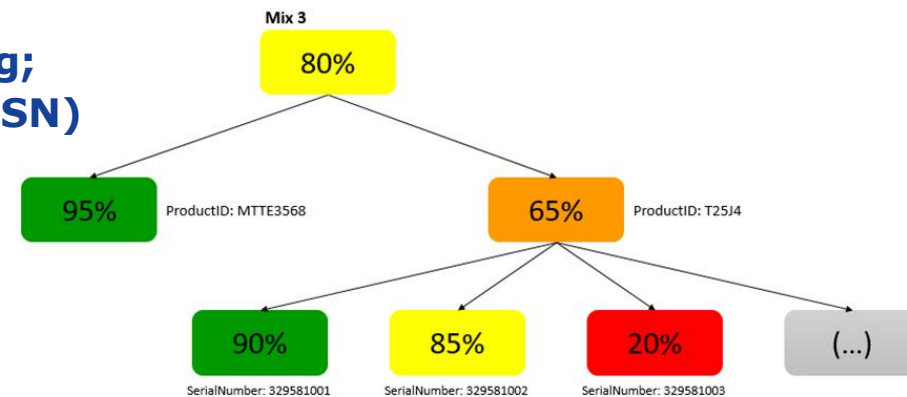# Example 2: Spillover into national projects (Inov. Prod.)

- **Project Name: P2020 CoCereal Value** (2018>2019)

- **Innovation project, P2020 "Inovação Produtiva", focused on industrial demonstration, either of i4.0 IoT Platform and MSM-Multi-Layer Stream Mapping in SaaS component**

- **INEGI was contracted to this Technology Transfer project to SME company E.I.B. in Marinha Grande (rubber tire components).**

- **New features to MSM SW; automatic reporting; new drill-down capabilities (Prod_id > Batch SN)**

- **New performance indicators for Operative Variables (Temperature, Speed, Quality, etc.)**

- **Four Pilot Areas of E.I.B**

THANK YOU