

CASI

Устойчиви иновации: дефиниция и
управление

CASI-F накратко

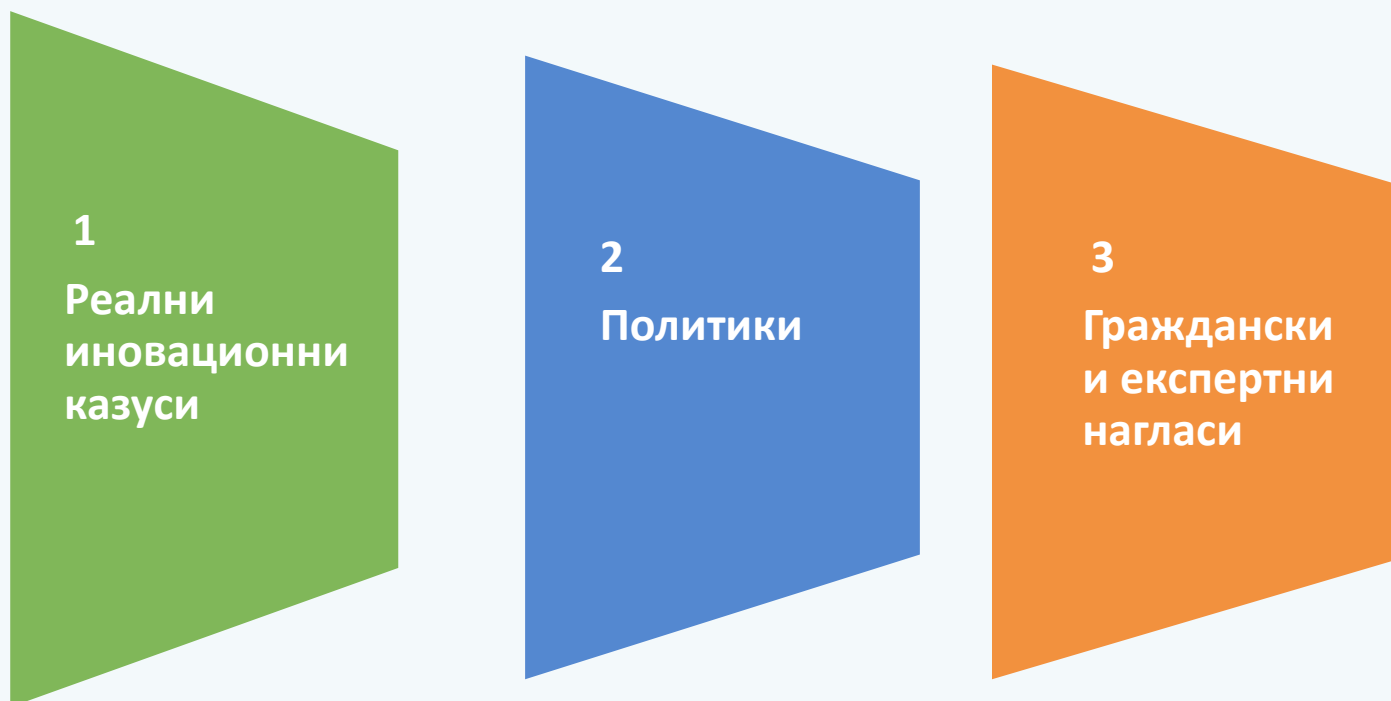
CASI към момента е най-амбициозният опит в ЕС за създаване на общо-европейска дефиниция за устойчиви иновации и рамка за анализа и управлението им.

- **Финансиран от Европейската комисия** чрез 7-ма рамкова програма
- **19 партньора** и кореспонденти на проекта **във всички държави на ЕС**
- **42 месеца** задълбочен и холистичен анализ, създаване и пилотно приложение на рамката CASI-F
- **CASI-F е жив инструмент** за съвместно създаване на знание, анализ и управление, чиято цел е **подобряване на икономическата, социалната и екологичната устойчивост на седемте вида иновации**: продукт, услуга, социална, организационна, управленска, системна и маркетингова.



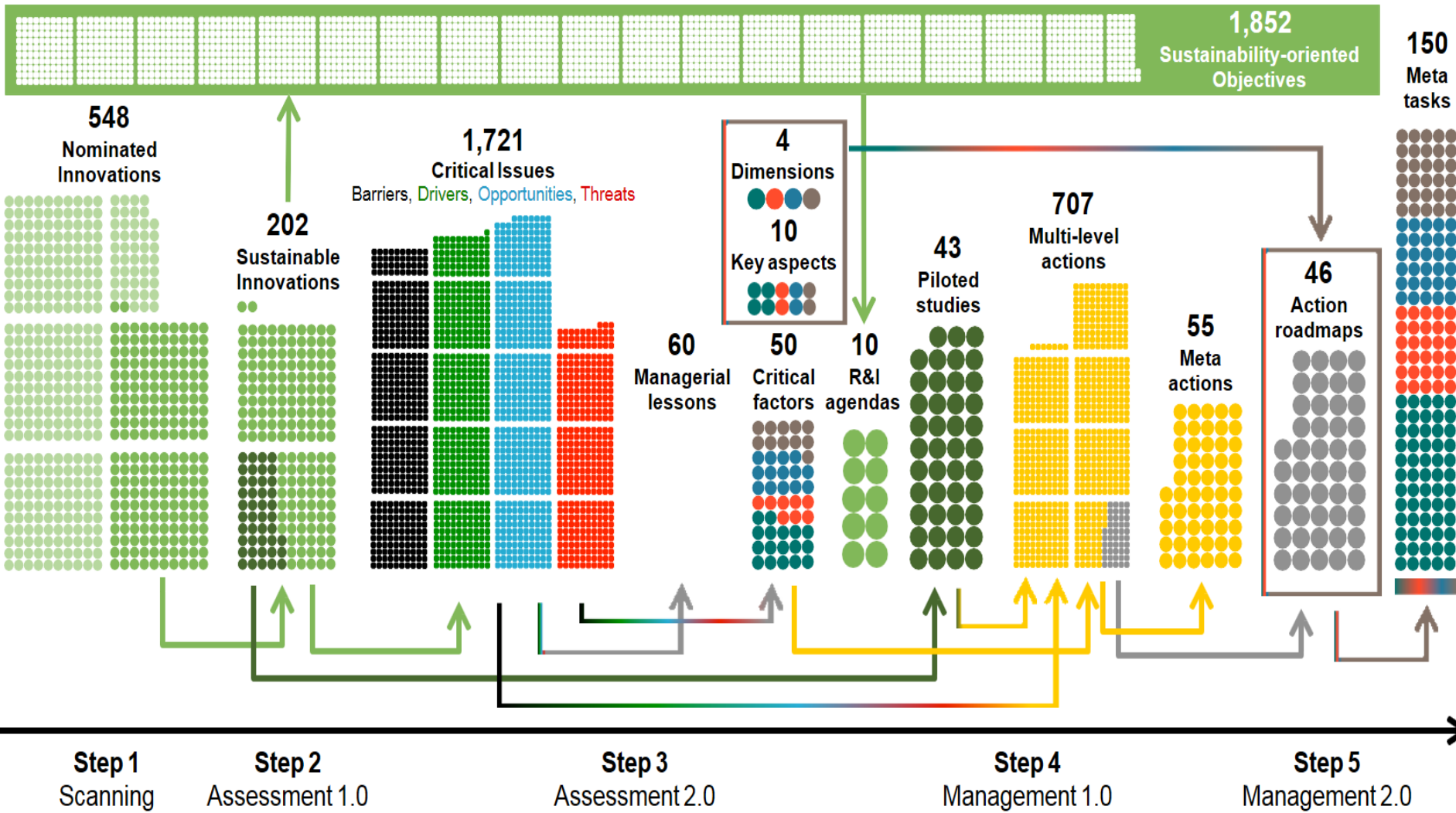
Подходът на CASI-F

3 паралелни дименсии на анализ



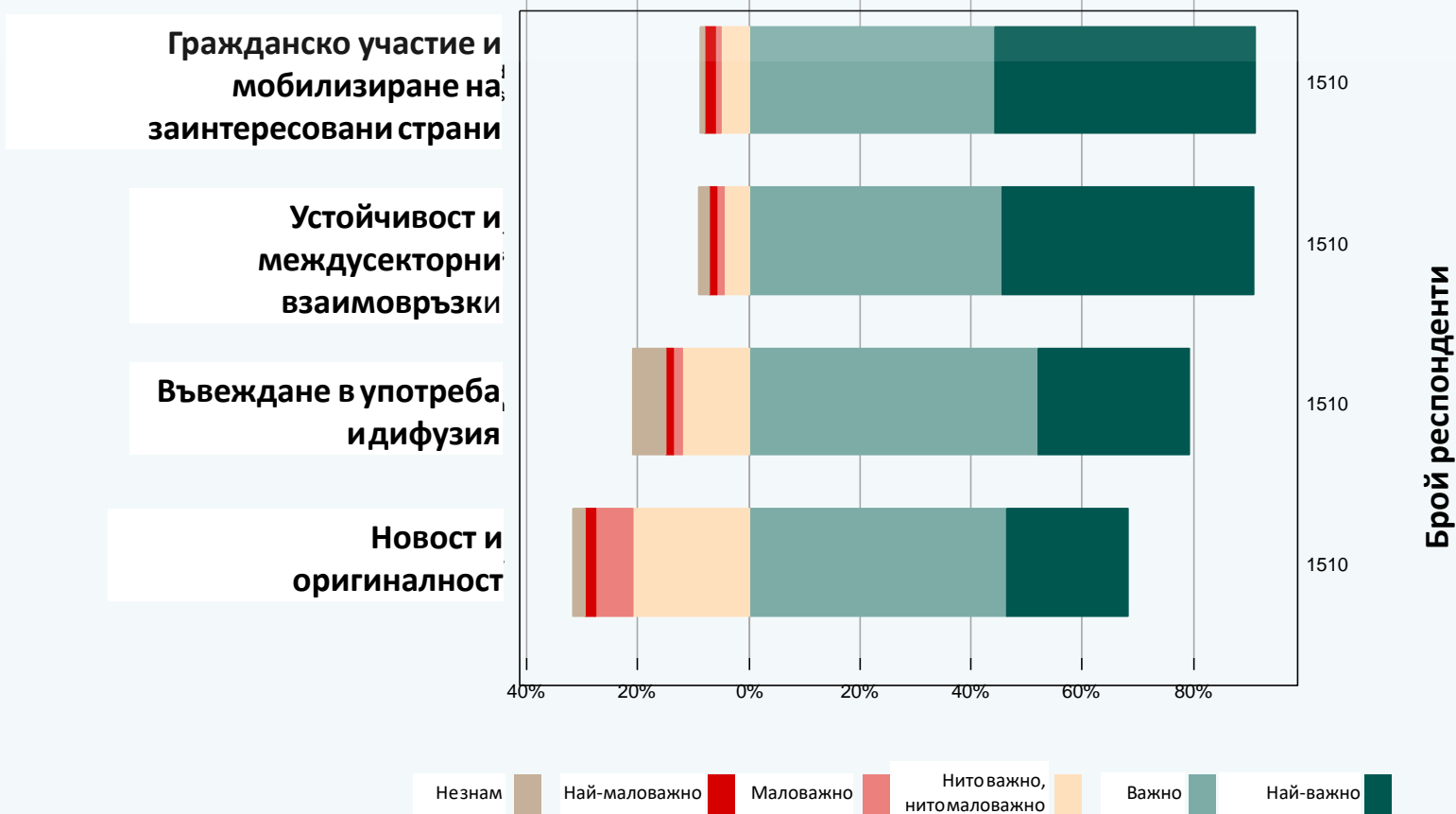
Source: Popper et al. (2017) – See also <http://www.casi2020.eu/casi-f/>

Как разработихме CASI-F?



Кое прави иновацията устойчива?

Значение на характеристиките на устойчивите иновации



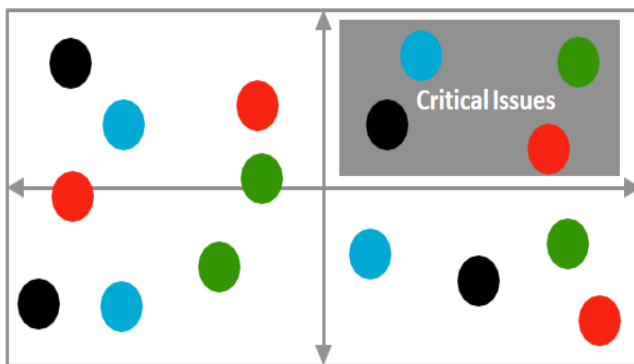
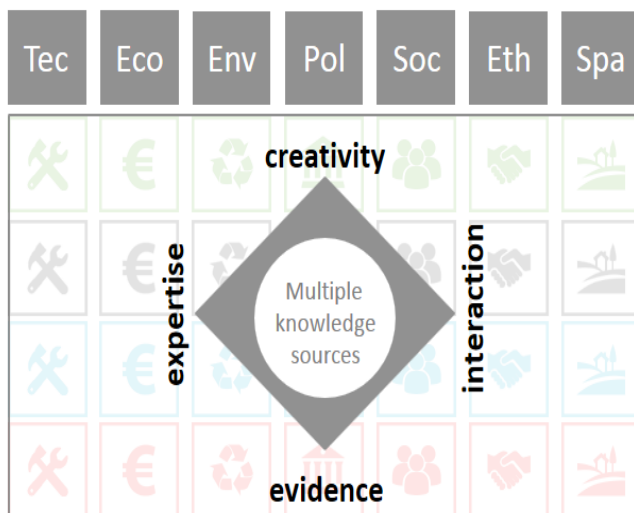
С какво ще Ви е полезен CASI-F

- ✓ **Управлявайте иновациите си устойчиво чрез холистичен подход:** оценете иновацията си от гледна точка на пазара, академичната сфера, регулаторната рамка и обществото;
- ✓ **Планирайте на стратегическо, управленско и оперативно ниво в 5 стъпки**

Стъпка 2: анализ на критичните моменти

Critical Issue analysis & assessment

TEEPSES approach



What to do?

- Analysis of shapers and **Critical Issues (CI)**
 1. **Creativity**-based
 - Using scenarios, brainstorming, surveys, etc.
 2. **Interaction**-based
 - Using workshops, citizen panels, conferences, etc.
 3. **Evidence**-based
 - Using modelling, literature review, extrapolation, etc.
 4. **Expertise**-based
 - Using expert panel, interviews, critical technologies, etc.
- Assessment of shapers and **Critical Issues (CI)**
 1. Define two or more criteria for criticality assessment
 - E.g. **Importance, Uncertainty, Urgency**, etc.
 2. Rate TEEPSES issues against selected criteria
 - Using a **Likert-like scale** of 1 to 5 or 1 to 7
 3. Plot TEEPSES issues against a criticality chart
 - Selecting **critical issues** for management

Стъпка 3: Многопластово управление

Multi-level advice management

Multi-level & Multi-Actor (ML-MA) Approach	Government	Business	Civil society	Research & education
Top-level management: Strategic actions	Strategic actions involve the definition of high-level aims, challenges, goals, objectives and priorities that require strategic attention or orientation from top-level decision-makers in government, business, civil society, research and education organisations.			
Mid-level management: Tactical actions	Tactical actions require mid-level decision-makers to translate strategic level objectives and priorities into tactical interventions, such as investment, research or knowledge transfer programmes and calls, funding schemes or instruments as well as development and implementation mechanisms.			
Front-line management: Operational actions	Operational actions require the intervention of front-line decision-makers - policy makers, civil servants, entrepreneurs, citizens, researchers and workforce- who are directly responsible for the operationalisation of day-to-day activities linked to tactical and strategic actions.			

What to do?

- **Management of multi-actor advice**
 1. Advice with and for the quadruple-helix of SI actors
 - Responses to CI with and for **Government**
 - Responses to CI with and for **Business**
 - Responses to CI with and for **Civil society**
 - Responses to CI with and for **Research and education**
- **Management of multi-level advice**
 2. Cluster advice around strategic actions
 - E.g. aims, challenges, goals, objectives and priorities
 3. Cluster advice around tactical actions
 - E.g. research programmes, funding schemes or instruments
 4. Cluster advice around operational actions
 - E.g. conducting research, technology development, etc.
- **Prioritisation of clustered actions**
 5. Rate the actions against commonly agreed set of criteria
 - E.g. **Importance, Feasibility, Impact**, etc.

Стъпка 3: Многопластово управление

Action roadmaps management

Management Dimensions	Management Key Aspects			
CONTEXT dimension	Momentum	Foresight	Resources	Mobilisation
PEOPLE dimension	Aptitude		AStude	
PROCESS dimension	Catalysts		Fosterers	
IMPACT dimension	Transformation		Sustainability	

What to do?

- Management of **action roadmaps**
 1. Generate sub-actions for each SI management dimension
 - I.e. Context, People, Process, Impact
- Management of **sub-actions by key aspect**
 2. Generate sub-actions for each SI management key aspect
 - ✓For **Momentum**: political setting, exemplars, problems.
 - ✓For **Foresight**: horizon scanning, trends, strategic targets.
 - ✓For **Resources**: geography, funding, infrastructure, data, scalability.
 - ✓For **Mobilisation**: champions, 4-helix, proactive participation.
 - ✓For **Aptitude**: leadership, charisma, creativity, knowledge.
 - ✓For **Attitude**: enthusiasm, empathy, involvement, commitment.
 - ✓For **Catalysts**: comprehensibility, crowd-sourcing, learning-by-doing, supportive services, absorptive capacity, piloting, ex-ante impact evaluation.
 - ✓For **Fosterers**: incentives, coordination, networking and synergy, knowledge management, IP management, ex-post impact evaluation, communication, dissemination.
 - ✓For **Transformation**: stakeholder and community development, knowledge-based products and services, values & lifestyle changes, capacities & skills, multi-challenge approaches, entrepreneurship.
 - ✓For **Sustainability**: societal, economic, environmental, government, infrastructure systems.
 3. Indicate sub-actions implementation timeframe (S-M-L-terms)
 - Short-(up to 12 months), Medium-(12-24 m), Long-term (24+ m)

Пример с продуктова иновация

(Стъпки 1 и 2)

- **194 казуса** на иновации на продукти преминаха през анализ на устойчивостта
- **38 казуса** на иновации на продукти бяха избрани за по-систематичен анализ и оценка на критичните моменти
- **274 фактора** (т.е. бариери, шофьори, възможности и заплахи) вследствие на критичен анализ на проблемите и оценка на избраните иновационни продукти

Example of steps 1 to 3 of CASI-F applied to a product innovation

Step 1:
Sustainability
relevance &
scanning
+
Step 2:
Multi-criteria
analysis &
assessment

Step 3:
Critical issue
analysis &
assessment

WAI	
CASIPEDIA source: http://www.casi2020.eu/casipedia/cases/1089	Innovation Type 
SI Description	Product/ process
This product innovation aims to introduce to the international market a new technology for transforming agricultural, urban, industrial, and forestry waste into a new eco-material with outstanding mechanical and calorific characteristics. Its mechanical properties make the material very attractive as a substitute for wood and other natural resources, and its calorific features give the material great potential to be used as an eco-fuel.	
SI Lead organisation	
WASTE'S ALCHEMY IBÉRICA SL (Spain)	
SI Objectives	
<ul style="list-style-type: none"> • Develop a technology for transforming waste into an eco-material with remarkable calorific, mechanical and ecological characteristics • Commercialise this technology to the waste treatment sector, both nationally and internationally • Establish strategic alliances to commercialize the eco-material, through waste treatment entities, to electric power plants and high-energy-consumption industries (use of the material as an eco-fuel) • Establish strategic alliances to commercialise the eco-material in the construction and derived sectors and to consumer-goods manufacturers (material used as a substitute for natural sources, e.g. wood) 	
Critical issues	
	Commercial agreements (political driver): The potential markets (consumers) of the eco-material (i.e. markets to be directly addressed by the waste treatment entities, and eventually by WAI through strategic agreements) are: a) electric power plants introducing renewable and low-carbon alternatives in their systems and to increase their energy-production efficiency (apart from the high calorific properties, the homogeneity and malleability of the WAI eco fuel adds another important advantage in terms of electric production efficiency); b) industries requiring large amounts of energy in their production processes, such as paper-mills and the cement industry; c) consumer-goods manufacturers, construction firms and derived sectors aiming to substitute natural and non-renewable materials.
	Environmental concerns and EU awareness (environmental driver): WAI's technology contributes to solving four European problems: (1) recovering urban and industrial wastes contributes to relieving the environmental pressure and ecosystem instabilities caused by the residues accumulated in landfill sites; (2) the use of the eco-material contributes to preserving natural resources (e.g. wood, coal) and reducing the use of plastics and non-recyclable materials; (3) the use of the material as a fuel constitutes a climate change mitigation action by the replacement of contaminant fossil fuels and reduction of CO2 emissions; (4) the renewable material will contribute to making the transition to a reliable, affordable, publicly accepted, competitive and sustainable European energy system, with less dependence on international imports.
	Limited capacity for international expansion (social barrier): The company should reinforce the international network and the necessary skills for internationalisation.

..Пример с продуктова иновация

(Стъпка 3)

- 67 действия бяха предложени, като се използва подходът за управление на консултациите на няколко равнища
- 6 пътни карти бяха разработени, които адресират мениджърските аспекти: контекст, хора, процеси и въздействие

Example of steps 4 to 5 of CASI-F applied to a product innovation

Step 3:
Multi-level advice management

Step 5:
Action roadmaps management

SI Management Action	Increase staff innovation management skills and capabilities			
Action Type	Top level management (strategic action) - Initiate (carry out tasks never done in the past)			
Relevant actor	Business actor (Innovator)			
CONTEXT dimension sub-actions	MOMENTUM Identify and analyse database of existing innovation management programmes in international business schools and attend education fairs Timeframe: Medium-term	FORESIGHT Identify emerging management skills and capacities in the sector, through journals, conferences Timeframe: Short-term	RESOURCES Apply to local/national funds for management skills development Timeframe: Medium-term	MOBILISATION Establish new contacts with local/regional business schools, and researchers dealing with management skills and capabilities development (become a case study in schools) and incorporate action research in the company Timeframe: Medium-term
	PEOPLE dimension sub-actions	APTITUDE Create an internal repository to facilitate knowledge transfer within the company, differentiating management skills from technical education Timeframe: Short-term	ATTITUDE Foster staff creativity with participatory workshops, e.g. generate future actions through highly-transformed scenarios Timeframe: Long-term	
PROCESS dimension sub-actions	CATALYSTS Involve key stakeholders in piloting and experimenting with the firm's innovation phases Timeframe: Short-term	FOSTERERS Establish incentive procedures to reward staff professional development Timeframe: Medium-term		
IMPACT dimension sub-actions	TRANSFORMATIONS Analyse staff potential and training objectives in relation to local jobs and competences Timeframe: Short-term	SUSTAINABILITY Develop staff education plans for the employers' family so as to bring together professional and personal development Timeframe: Long-term		

БЕНЧМАРКИНГ: с мениджърски практики от цяла Европа!

ACTIONS BANK

ADD AN ACTION

KEY MANAGEMENT ASPECTS

CONTEXT	PEOPLE	PROCESS	IMPACT
<input type="checkbox"/> Mobilisation (146)	<input type="checkbox"/> Attitude (48)	<input type="checkbox"/> Catalysts (74)	<input type="checkbox"/> Transformations (34)
<input type="checkbox"/> Resources (81)	<input type="checkbox"/> Aptitude (34)	<input type="checkbox"/> Keepers (93)	<input type="checkbox"/> Sustainability (29)
<input type="checkbox"/> Foresight (28)			
<input type="checkbox"/> Momentum (70)			

GEOGRAPHICAL RELEVANCE

Austria <input type="checkbox"/> 164	Czech Republic <input type="checkbox"/> 102	Poland <input type="checkbox"/> 89
United Kingdom <input type="checkbox"/> 82	Bulgaria <input type="checkbox"/> 81	Germany <input type="checkbox"/> 79
Finland <input type="checkbox"/> 77	Italy <input type="checkbox"/> 77	Slovenia <input type="checkbox"/> 56
Denmark <input type="checkbox"/> 50	Belgium <input type="checkbox"/> 47	Portugal <input type="checkbox"/> 44
Sweden <input type="checkbox"/> 40	Netherlands <input type="checkbox"/> 36	Greece <input type="checkbox"/> 36
Ireland <input type="checkbox"/> 28	Latvia <input type="checkbox"/> 28	Luxembourg <input type="checkbox"/> 28
Estonia <input type="checkbox"/> 28	Spain <input type="checkbox"/> 22	Romania <input type="checkbox"/> 12
Croatia <input type="checkbox"/> 11	Cyprus <input type="checkbox"/> 8	

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CASIPEDIA?

Search

Sort by

All SI Title SI Description SI Lead organisation SI Objectives SI Origin

Filter

TYPE OF INNOVATION	KEY AREAS	SUCCESS FACTOR	GEOGRAPHICAL SCOPE
<input type="checkbox"/> Product (194)	<input type="checkbox"/> Climate action (345)	<input type="checkbox"/> Technological	
<input type="checkbox"/> Service (121)	<input type="checkbox"/> Environmental (57)	<input type="checkbox"/> Economic (35)	
<input type="checkbox"/> Organisational (62)	<input type="checkbox"/> Resource efficiency (397)	<input type="checkbox"/> Environment	
<input type="checkbox"/> Marketing (19)	<input type="checkbox"/> Raw materials (258)	<input type="checkbox"/> Political (138)	
<input type="checkbox"/> Social (75)		<input type="checkbox"/> Social (277)	
<input type="checkbox"/> System (31)		<input type="checkbox"/> Ethical (74)	
<input type="checkbox"/> Governance (46)		<input type="checkbox"/> Spatial (104)	

SECTORAL RELEVANCE

Manufacturing <input type="checkbox"/>	149	Energy <input type="checkbox"/>	118
Agriculture <input type="checkbox"/>	79	ICT <input type="checkbox"/>	73
Transport <input type="checkbox"/>	69	Construction <input type="checkbox"/>	65
Health/Social services <input type="checkbox"/>	42	Accommodation & Food <input type="checkbox"/>	41
Retail <input type="checkbox"/>	31	Arts & entertainment <input type="checkbox"/>	27
Real estate <input type="checkbox"/>	17	Finance <input type="checkbox"/>	12

Results (548)

« < 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 ... 55 > »

- Transition Now**
Transition Now (Omstilling Nu) is a network and a project platform that works to create transition to a sustainable...
22.08.2014
- KOKOZA - more green in cities**
KOKOZA, o.p.s is a social enterprise based in Prague (Czech Republic) promoting composting and gardening in urban...
11.11.2015
- Let's Clean Up Czech Republic**
'Let's Clean Up Czech Republic' is an innovative project that mobilises volunteers from different age groups and...
22.11.2015
- Innovation Fur**
Innovation Fur is a development project launched by the island of Fur, Skive municipality, and EnergiMidt. The...
19.08.2014
- Biomass-fired combined heat and power plant Örtoftaverket, Örtofta, Skåne...**
Örtoftaverket is one of the largest biomass-fired combined heat and power plants (CHP) in Southern Sweden and the...
28.07.2014
- Rural Electrification in Remote Croatian Areas**
The case involves bringing electricity to remote rural areas (the first being Ajderovac in Lika Senj County) which...
18.09.2014
- Fairphone**
Fairphone is a social enterprise working to create a fairer economy and change how things are made by opening up...
22.08.2014
- UbiGo mobility service - an app for unified urban travel, Gothenburg, Sweden**
Between Nov 2013 and Apr 2014 71 households in Gothenburg tested a fully integrated mobility service UbiGo...
29.07.2014
- Sustainable Habitat Cluster**
Sustainable Habitat Cluster brings together companies from the extractive sector to the transformation of building...
29.09.2014



ПРЕДСТОИ:

май 2017:

**обучение за боравене с инструмента CASI
с опция за сертифициране**

за записване: Мария Александрова, 0877926996,
maria@cleantech.bg

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закриващо събитие за експерти на 30 май