



The proper exploitation strategy

Frosina Ilievska

Project Manager Europa Media- Part of EMG Group

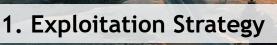
Exploitation and IPR in EU R&I Projects 4th of June 2020 Online course

© Europa Media It is strictly prohibited to use or distribute the content and design of this presentation without Europa Media's prior consent.

Set your strategy



Expected impacts you want to achieve



Commercial? Noncommercial? Follow-up

> Protection of project results; Manage onwership and access to knowledge

> > 2. Dissemination Strategy

Knowledge Management

Data Management

Range of tools and channels; Communication

Delivery of the expected impacts

What is Exploitation?

Exploitation = Use of results

Exploitation of the results (either directly or indirectly) by:

- a. Using them in further research activities (outside the action)
- b. Developing, creating or marketing a product or process
- c. Creating and providing a service
- d. Using them in standardisation activities.



Is that a legal obligation coming from the Grant Agreement you sign as a beneficiary?

Art. 28 of the Model Grant Agreement

Each beneficiary must - up to vears after the end of the project - take measures aiming to ensure exploitation of its results (either directly or indirectly) by:

- a. Using them in further research activities (outside the action)
- b. Developing, creating or marketing a product or process
- c. Creating and providing a service
- d. Using them in standardisation activities.



Best effort obligation: the beneficiaries must be proactive and take specific measures to ensure that their results are used (to the extent possible and justified)

Art. 28 of the Model Grant Agreement

Each beneficiary must - up to **four** years after the end of the project - take measures aiming to ensure exploitation of its results (either directly or indirectly) by:

- a. Using them in further research activities (outside the action)
- b. Developing, creating or marketing a product or process
- c. Creating and providing a service
- d. Using them in standardisation activities.



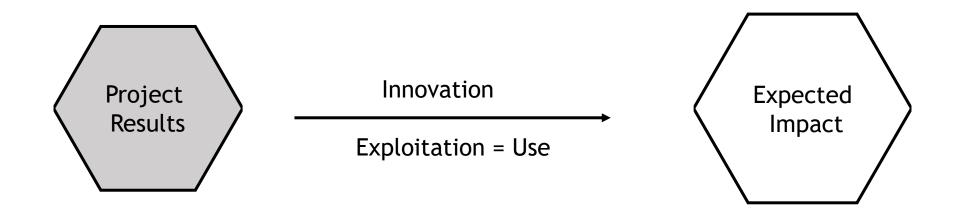
Best effort obligation: the beneficiaries must be proactive and take specific measures to ensure that their results are used (to the extent possible and justified)

Approaching Exploitation



Proposal Part B Section 2.2: Measures to maximise impact

a. Dissemination and exploitation of results



You need to list the exploitable results knowing what benefits their use will generate

Results, Assets = IP (Intellectual Property)

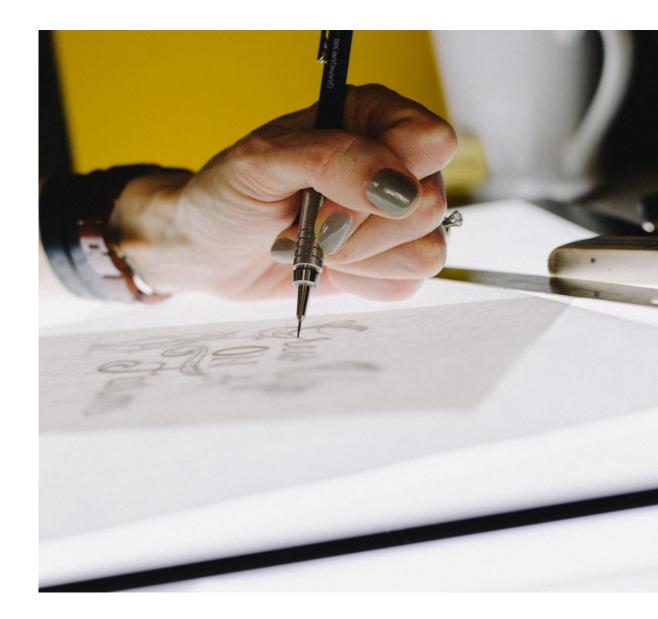
- Invention
- Software
- Report
- ??
- ?? Can you list any other?
 ??

- ??
- ??
- ...



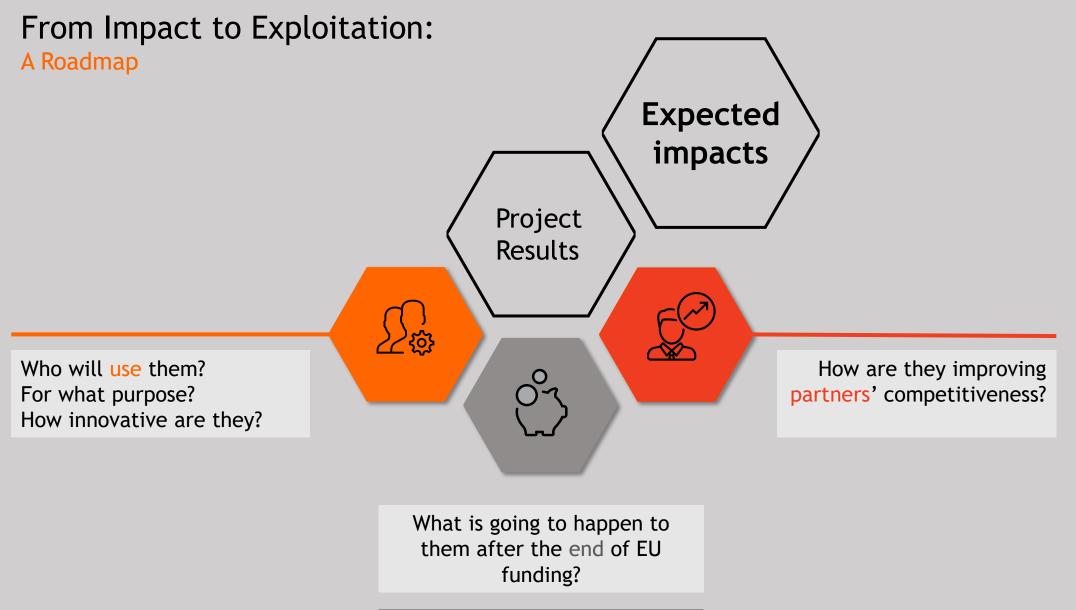
Results, Assets = IP (Intellectual Property)

- Invention
- Software
- Report
- Design
- Database
- Book
- Work of art
- Video
- Roadmap
- ...

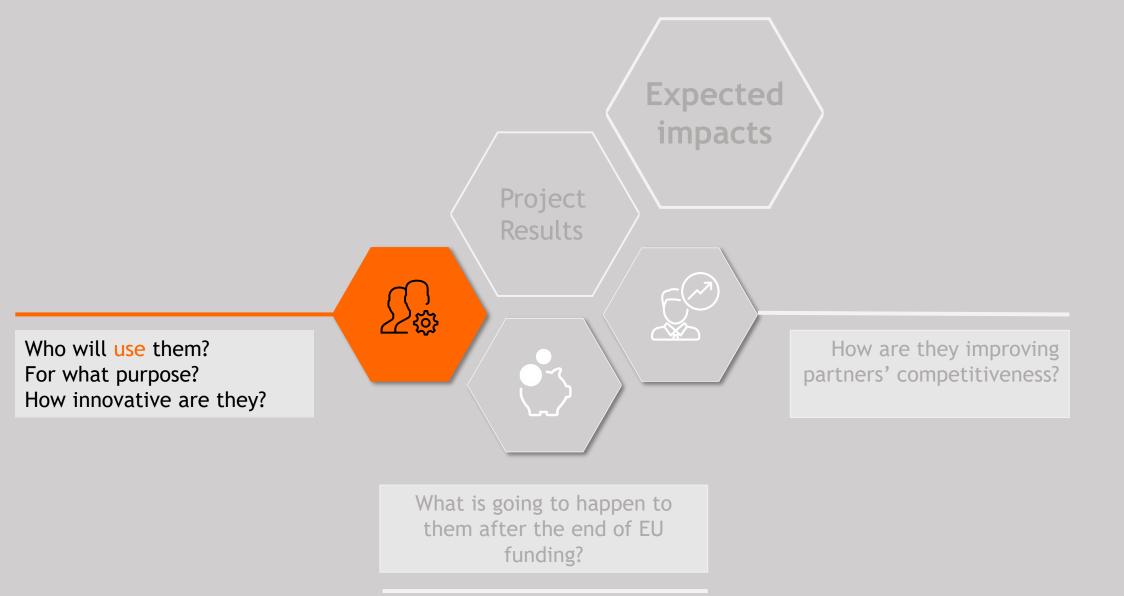


Writing Exploitation

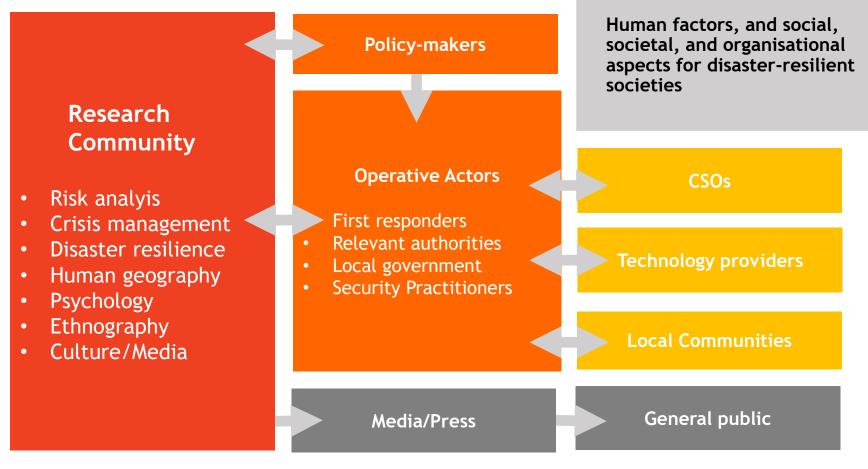








Value-Chain/Stakeholder map



Topic SU-DRS01-2018-2019-

2020:

Methods, Knowledge



Potential users

- Identify for whom the results would be relevant and beneficial, responding to their needs (who wants them, who will use them)
- How are you going to interact with them?
 - Partner
 - Part of an "End-User Board"
 - Advisor
 - External participant in specific activities
- Consider the full range of potential users and uses: research, commercial, investment, social, environmental, policy-making, setting standards, skills and educational training, and across the supply and the value chain

 \rightarrow Link with the Dissemination and Communication Strategy



Purpose and Benefits

- How are those groups of people going to use your new product/service/ solution/knowledge?
- What are the needs you meet?
- What is the benefit for them?
- Keep in mind the expected impact!

THE BENEFIT CAN BE SOCIETAL, • RESEARCH, ENVIRONMENTAL, • TECHNICAL, • EDUCATIONAL, • ETC. • AS WELL AS FINANCIAL= COMMERCIAL



Target group assessment

THE BENEFIT CAN BE

Target group identified	Needs/Demands of the target group What kind of results they need?
Healthcare organisations	Evidence that the solutions work, cost-efficient solutions; end-user needs assessment results; co-creating the solution – share their needs and have tailored solutions; capacity-building opportunity
Policymakers	Regional solutions – efficient for remote patients/areas; low cost solution; reliable web- based solution; evidence identifying new solutions for better policies; best practices from other legislative solutions from other regions
Others projects, networks	Access to knowledge and solutions; share the knowledge; synergy; save costs; legal access rights royalty free

How about innovation?

Types of innovation in a project

- Do you meet any specific need of any specific end-user with this innovation?
- Why is your (new) solution better than any other existing one? Why would the users choose to try/test/use your solution?
- Is your innovation also a social innovation? How so?
 - Social innovation: something that affectscitizens' every-day life. It can be a collaboration model and boost citizens' engagement.
- Discuss scientific and technological innovation:
 - Innovation can be based on new products or services as well as:
 - technologies and tools;
 - processes, procedures and methodologies;
 - improved networking, collaboration, synergies.

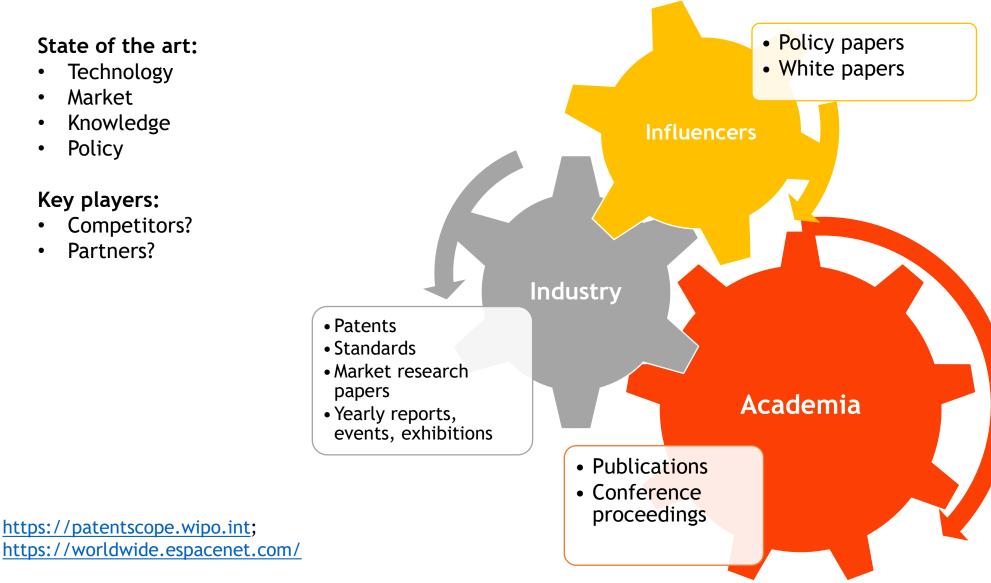
Open Disruptive Breakthrough Social Sustainable

Innovation potential Assess the market

- Consider innovation potential with:
 - State-of-the-art analysis (SOTA)
 - Identifying research competitors and market competitors
 - Searching for standards
 - Patent search
 - Checking existing IP & IPR within the consortium and third parties
 - Market factors analysis (e.g. freedom to operate, size, segmentation, distribution, growth, etc.)
- Decide on:
 - Technology Readiness Level start and end level
 - Position your project in the value and supply chain







State of the art:

- Technology ٠
- Market ٠
- Knowledge ٠
- Policy ٠

Key players:

- Competitors? •
- Partners? •

https://www.cencenelec.eu/research/tools/Horizon2020

Assess innovation capacity

- Organisational innovation capacity refers to a single organisation's capability to produce and exploit new products, services, systems or processes over periods of time.
- For a H2020/HEU **project** consider the capacity on consortium level to:
 - use multiple external sources besides the internally available to drive innovation;
 - learn and use scientific, technological or other knowledge that exists outside of the project BUT capture also all internally developed ideas in the project
 - exploit, transform and commercialise the results/knowledge generated
 - create strong connections and cultivate co-operative connections

TRAININGS

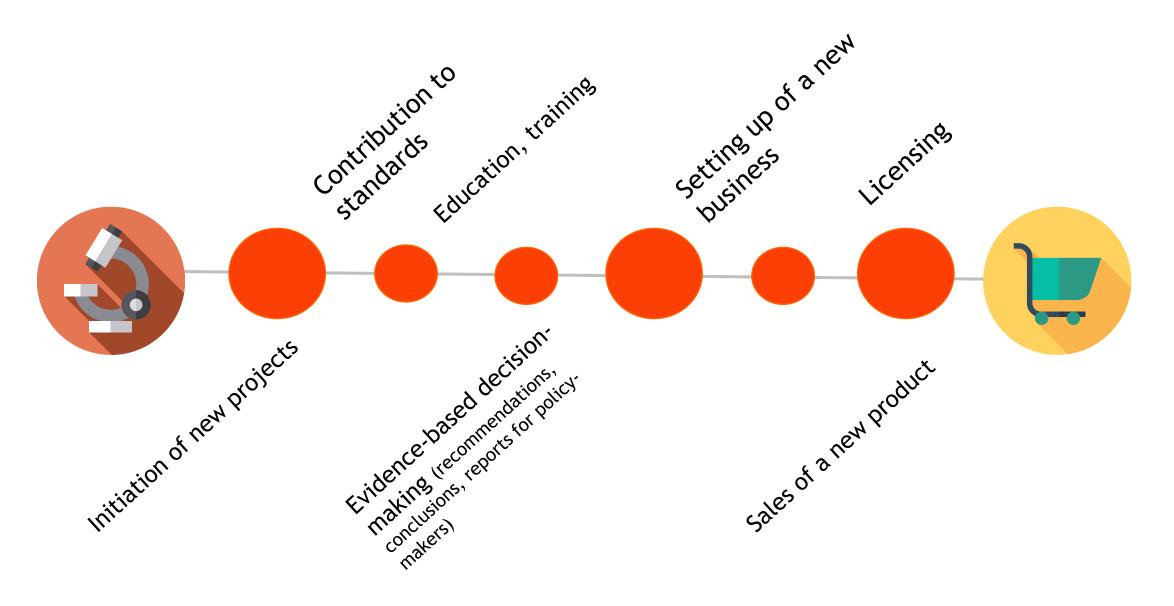
Exploitation Management	Innovation Management
It focuses on results level	Overall management
It can include IPR Management	It includes exploitation management and IP management
It can include enhancing the innovation capacity	It includes identifying the innovation potential







Exploitation routes



Exploitation route examples (New research project)

FOSTERING SUSTAINABLE FEEDSTOCK PRODUCTION FOR ADVANCED BIOFUELS ON UNDERUTILIZED LAND IN EUROPE

FORBIO project will demonstrate the viability of using land in EU Member States for **sustainable bioenergy feedstock production that does not affect the supply of food and feed,** in addition to not interfering with land currently used for recreational and/or conservation purposes.

Project activities and outputs set the basis for building up and strengthening **local bioenergy value chains that are competitive and that meet the highest sustainability standards,** thus contributing to the market uptake of sustainable bioenergy in the EU.



This project has received funding from the European Union's H2020 research and innovation programme under grant agreement N^o 818083 This website reflects only the author's view and that the European Commission is not responsible for any use that may be made of the information it constrained

PROMOTING SUSTAINABLE USE OF UNDERUTILIZED LANDS FOR BIOENERGY PRODUCTION THROUGH A WEB-BASED PLATFORM FOR EUROPE





Exploitation route examples (Policy recommendations)

#9	Policy recommendations		
Result Owner(s)			
Related Deliverables/ Work Package	D6.4 (WP6: Synergies and Exploitation)		
Short Description	Recommendations for policy and decision makers (EU, regional, national, local) to strengthen the entrepreneurship ecosystems and maximize the growth potential of <u>startups</u> in the CEE countries.		
Exploitation Routes	 Together with EM (Project Coordinator) will present the outcomes of MY-GATEWAY policy recommendations to some of the European MPs, relevant networks, policy and decision makers to promote a bottom-up approach in the next programming period and for entrepreneurial initiatives set by the Commission for the coming years (e.g. DISC initiative). 		
	 On a more regional and local level, policy recommendations will be exploited by CEE partners (I) and the recently established Startup Europe Networks. 		

Exploitation route examples (Education/training)

#7	Capacity Building Package				
Result Owner(s)	a de la contra de la				
Related Deliverables/ Work Package	D5.1, D5.2, D5.4 (WP5: Capacity Building)				
Short Description	The Capacity Building Package gathers the training curricula, methodology, <u>materials</u> and evaluation on public and private funding opportunities.				
Exploitation Routes	Either the implementation of training courses on private and public funding opportunities either the evaluation of the delivered modules by attendees, revealed the existence of an unmet needs of CEE startups and businesses to know more on available funding schemes to support their activities. Because of this, and jointly decided				
	to continue delivering the training courses on funding opportunities across the CEE countries and beyond (e.g. Western Balkans and in the rest of Europe, according to the demand). All CEE and WB partners confirmed their interest to host these courses. The trainings will be delivered to entrepreneurs, <u>startups</u> , SMEs and other types of professionals under the payment of a participation fee. Participation fee may vary according to the attendees' affiliation.				

Exploitation route examples

	What?	By Whom?	How?
IPR creation	The INNO-4-AGRIFOOD Search Tool is protected via copyright held by . The Search Tool is available for use free of charge.	is the partner that developed the Search Tool. As such, will undertake the management of all copyright related issues (particularly protection).	Copyright needs no registration or additional agreement since, as an IP right, it is established upon creation of the material. The copyright will be expressly stated on each reference regarding the Search Tool. Apart from reference to as "creator", the reference also indicates that it was created within the framework of the INNO-4- AGRIFOOD project.
Information on EU Funding	Express reference is made to EU Funding, in accordance with article 27 of the Grant Agreement.	The reference has been introduced by	The reference on EU funding has been made on the user interfaces of the Search Tool and its apps.
IPR protection	The Search Tool is publicly available for use. A case of infringement upon the copyright is the case where a third party exploits such tool for profit (offers services for a fee).	will undertake the management of protection in case of infringement.	Protection of IP is an obligation of the consortium pursuant to article 27 of the Grant Agreement. In case that any project partner is informed about infringement by a third party which attempts to exploit for profit (upon a fee) any part of the publicly available tools, it will notify so that it can undertake appropriate action.

Exploitation route examples (Licenses)

H&C interventions at local level. The upgraded tool (enhanced version 2.0) will be closed source and made available to end-users at reasonable license fees taking into account that revenues coming from licenses will not be the only income for the The version 1.0 elaborated during the PLANHEAT project will remain open source and free for the end-users and will be continuously updated but will have less detailed functionalities. Version 2.0 which will enable more complex functionalities and connections with other existing tools and maps (transport, electricity and gas grid, etc...) and will be conceived for accompanying the second phase of the energy plan, i.e. from design to implementation. Version 1.0 will be used also as an entry point for addressing the energy plan market.

As a matter of fact, the potential I might be constituted by software developers and technical experts (in consulting engineering and design), complementing their expertise towards the promotion of diversified value propositions. On one hand, the integrated tool's enhancement with advanced functionalities will allow software commercialization; on the other, the technical experts could offer consulting engineering services to concretely implement the plans simulated by using the tool. The expected time to market for the enhanced integrated tool might 2021, taking also into account that the PLANHEAT software modules (namely mapping module, planning module and simulation module) could be exploited separately. A summary of activities, exploitable results and possible business strategies with reference to project/beyond the project timeline is presented in figure below.

Exploitation route examples (Setting up a new business)



HOME IDST RESEARCH REGISTRATION CONTACT US

INTEGRATED DECISION SUPPORT TOOL

Your perfect ally for planning optimal retrofitting concept and impressive live results demonstrations

WHY FELICITY?

- Efficient building data integration and building administration for energetic performance and building condition assessment through big data methods
- Time-saving data entry mode and easy to handle intuitive usage in 3D environment
- Flexibly applicable also under complex circumstances and easy integration of existing building information model
- Innovative integration of neighbouring buildings for district and property-wide concepts
- Fast thermal building simulation and worldwide 3D visualisation of results
- Innovative analysis functions for future-oriented technologies on neighbourhood level (RES, Energy networks, smart grids, storage systems)
- Life Cycle-wide evaluation of energy retrofitting measures through Key Performance Indicators (payback, ROI, Life Cycle Cost)
- Comprehensive energetic prioritization and assessment functions for the building stock regarding energetic figures and building renovation cost
- A unique interactive and portable tool ideal for board meetings and presentation to decision-makers

The tool uses a comprehensive European 3D building database which serves as an extendible basis for real-time thermal simulation and data visualisation. Life Cycle-wide evaluation of energy retrofitting measures and innovative analysis functions for future-oriented technologies on neighbourhood level are included.

Exploitable result	Partners involved	Exploitation route	IPR (protection)	End-users	Timeframe
Enzyme cocktails for	XY	Production, application and distribution of enzyme cocktails among	Patent application	Municipalities and waste managers	6-12 M post project
Stakeholder platform	ZC	Licencing to users	Copyrighted code	Waste managers, producers, etc.	1-2 years post project
Methodology for process optimization and scale up of biological processes	ZY	Set-up of open infrastructure to produce novel bioproducts	n.a.	BioTech Companies, other RTO's and Univ	End of project
Integrated process model	XC	Engineering services for projects and comapnies	n.a	Bio-based industries	1 year post project
Optimisation of characterization methods	SR	To be used internally	Industrial secret	SR	End of project

Market uptake

Present a market analysis:

- Company
- C...?
- C...?
- C...?
- C...?

Õ

Especially relevant for Innovation Actions

Present a business plan

- Credible
- Specific
- Quantitative as much as possible



Market uptake

Present a market analysis:

- Company
- Customer
- Competitors
- Collaborators
- Context

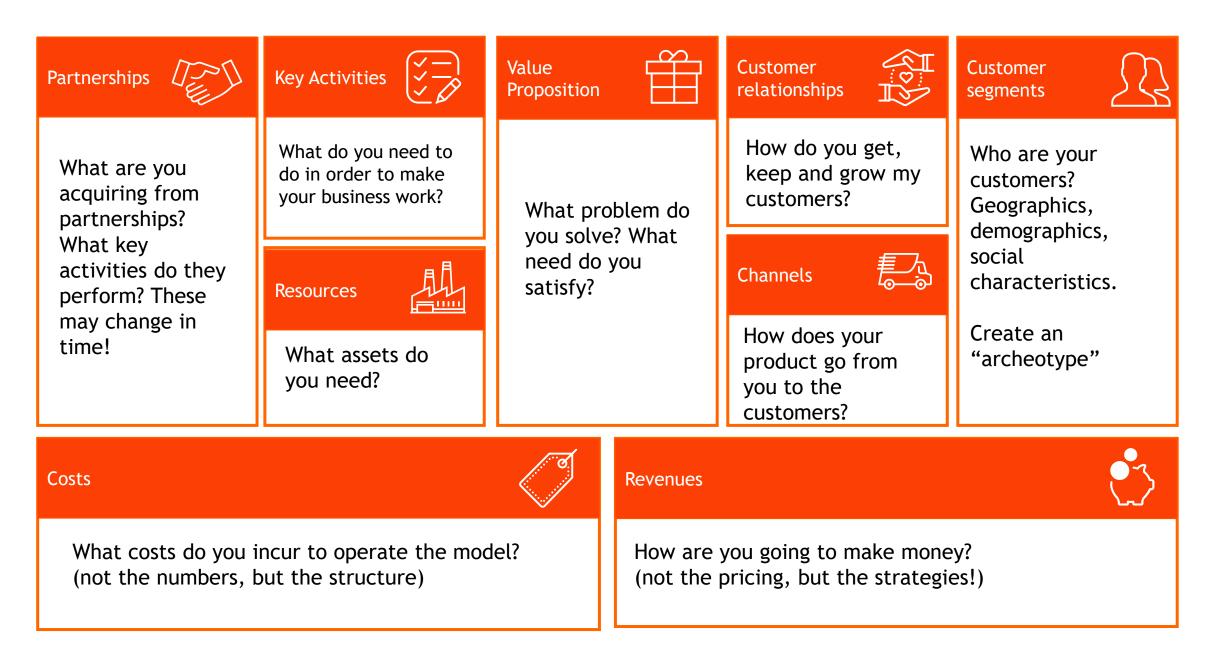
Especially relevant for Innovation Actions

Present a business plan

- Credible
- Specific
- Quantitative as much as possible







 Key Partners Agro-industries Biopesticides On anies Chemical industry Chemical industry Chemical industry Packag dustries Packag dustries Waste Management Authorities Waste Management Industries Wastewater Management Industries Citizenship Distributors Licensees Public Authorities 	Key Activities • Direct commercialisation • Integration assessment/know-how transfer • Application consulting • Indering processes • Key (e) urces • Production infrastry ures among partners • Engagement of end-users (citizens, municipalities and industrial sector) (WP2) • Technical & Sales force human capital • Financial capacity	 Value Propositions High value biobased products Valorisation of urban biowaste and sewage sludge. No need to landfill or incinerate waste Scalable Low carbon footprint 	 Customer Relationships Samples based trials for client engagement Free initial application assessment for client capture Direct marketing and Sales of the different products by the different partners Channels Specialised tradeshows Specialised events DEM (Direct Email Marketing) SEM (Search Engine Marketing) End-user engagement plan, wit on support of multipal ter Direct targetion Direct	Customer Segments Packaging end- users Agro-industries Food & Feed industries Chemical industries Chemical industries Waste management industries Wastewater management industries Wastewater management industries Municipalities Environmental Engineering industries		
Cost Structure Sales structure co assessment) Human capital costs	osts (including technical	Revenue Streams Sales of chemicals (alcohols and carboxylic acids), bioplastics, food and feed. Sales of enzymatic cocktails Royalties on licensing (of the processes developed in				

2.1.2.2 EnDurCrete business cases, business models and provisional exploitation plan

Along with the project evolution, exploitation routes for EnDurCrete products and services will be analysed, to achieve by the closure of the project, the definition of the most appropriate commercialization strategy to reach the target markets. The consortium will dedicate strong efforts to achieving, after project completion and a time-to-market of 3-4 years, commercial exploitation of the results and has thus foreseen in WP8 a horizontal activity aimed at the definition of exploitation models as well as plans for the specific systems and technologies to be developed and tested within the project and of a market entry strategy for the developed technologies, which will form the basis for the formulation of a final exploitation action plan by the consortium.

Yet, partners have already started a preliminary discussion about the best way to exploit the results and have taken preliminary agreements on a possible exploitation strategy.



The key strategy for the exploitation plan will be involving the selected CEE start-up hubs in the implementation, creation of synergies and transfer of knowledge to the Balkans via an ad-hoc workshops and an Action Plan that CEE can follow after the end of the project. In this way, the main target group of the MY-GATEWAY project will be highly engaged and opening the gateway to another region. All the knowledge MY-GATEWAY is based on, the one accumulated along the project, adapted in CEE and transformed into an easily transferable training material pack, will ensure the sustainability of the exploitation model after the duration of the project.

Sustainability mechanisms

- Include plans for activities to be carried out after the end of the project
 - Be realistic find an agreement with partners
- Consider the possible follow-up of your project
- Need additional funding? Consider potential links and synergies with other funding sources (e.g. European Structural and Investment Funds, EIF, etc.)









Individual exploitation plans

- Why have your partners accepted to be in the proposal?
- What's in it for them?
- What are the key results of interest for them?





Open-source vs Free software vs Freeware

Picture source: https://moqod.com/2019/09/ 23/understanding-opensource-and-free-softwarelicensing/

	Free software	Open-source software	Freeware	Public-domain software	
Definition	"FREE" is a matter of liberty, not price	"OPEN" doesn't just mean access to the source code	"FREE" refers to price, while freedom of the use is restricted by creator	"PUBLIC DOMAIN" belongs to the public as a whole	
Ground philosophy	Social movement	Development methodology	Marketing goals	Copyright disclamation	
Ground rules	Four Freedoms https://www.gnu.org/ philosophy/free-sw.html	Open Software initiative https://opensource.org/osd		Creative Common Organization https://creativecommons.org	
Free of charge	Not necessary	Not necessary	YES	√ YES	
Covered by copyright law	✓YES	VES	✓YES	🗶 NO	
Examples	Linux 👌 🧿 ubuntu f	MysqL Apache	S Skype	SQLite	

Copyright vs Copyleft vs Permissive vs Creative Common

	C Copyright		Permissive	CC Creative Commons	
What is a user allowed to do with the code?	What creator dictates	What user wants under certain rules	What user wants with a few restrictions	What user wants without restrictions	
Clause of the use	As creator dictates	Derivative work must be attributed to creator, open- source and copyleft	Derivative work must be attributed to a creator	Derivative work must be attributed to a creator	
Source code	As creator dictates	Must be open	Don't have to be open	No specific terms about the distribution of source code	
ls creator liable for bugs?	VES	VES 🗸	🗶 NO	🗶 NO	
Re-licensing	As creator dictates	Derivative work cannot be released as proprietary software	Derivative work can be released under another licen se or as proprietary software	Derivative work can be released under another licens e or as proprietary software	
Commercial restrictions	As creator dictates	Permitted	Permitted	Permitted	

Picture source: https://moqod.com/2019/09/ 23/understanding-opensource-and-free-softwarelicensing/

Open-source licenses

License type	Licenses	(1) Collection of loyalties is allowed when a program is distributed	(2) The source code is provided when the origi- nal program is redistributed	(3) The source code must be provided when a modification is distributed	(4) A modi- fication should be distributed under the same license as the origin- nal program	(5) A fee higher than the distribution cost can be collected when a program is distributed without the source code	(6) The pro- gram can be sublicensed	(7) A docu- mentation must be provided with a docu- mentation	(8) A fee higher than the distribution cost can be collected when a program is distributed with the source code	Degree of openness
GPL	GPL	No(+)	Yes(+)	Yes(+)	Yes(+)	No(+)	No(+)	Yes(+)	Yes(-)	1
type	LGPL	No(+)	Yes(+)	Yes(+)	Yes(+)	No(+)	No(+)	Yes(+)	Yes(-)	1
Others	MPL	No(+)	Yes(+)	Yes(+)	Yes(+)	No(+) (source code is always redistributed)	Yes(-)	Yes(+)	Yes(-)	2
	QPL	No(+)	Yes(+)	Yes(+)	No(-)	No(+)	No(+)	No(-)	Yes(-)	3
	CPL	No(+)	Yes(+)	Yes(+)	No(-)	No(+)	Yes(-)	No(-)	Yes(-)	4
	Artistic	No(+)	Yes(+)	No(-)	No(-)	No(+) (source code is always Redistributed)	No(+)	Yes(+)	No(+)	5
BSD type	Apache v.2.0	Yes(-)	No(-)	No(-)	No(-)	Yes(-)	No(+)	Yes(+)	Yes(-)	6
	Zlib	Yes(-)	No(-)	No(-)	No(-)	Yes(-)	No(+)	Yes(+)	Yes(-)	6
	Apache v.1.1	Yes(-)	No(-)	No(-)	No(-)	Yes(-)	No(+)	No(-)	Yes(-)	7
	BSD	Yes(-)	No(-)	No(-)	No(-)	Yes(-)	No(+)	No(-)	Yes(-)	7
	MIT	Yes(-)	No(-)	No(-)	No(-)	Yes(-)	Yes(-)	No(-)	Yes(-)	8

Source:

https://www.researchga

te.net/figure/Ranking-

of-FOSS-licenses-degree-

of-Openness-based-on-

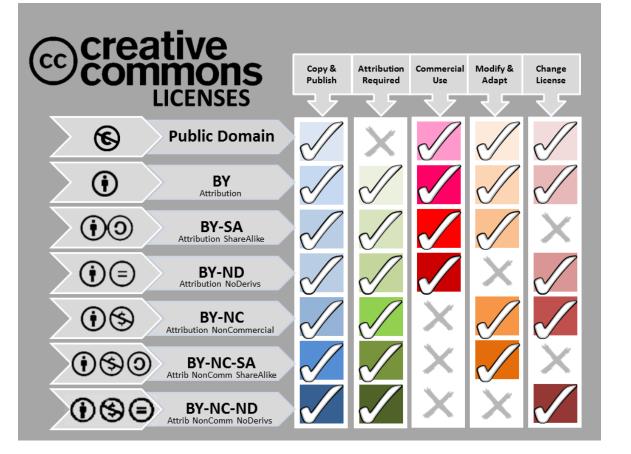
CC-

elements_tbl2_22058788

3

Creative Commons

- Combination of three layers
- Different than Open- source licenses- however more versatile.





Source: George Washington University and Creative Commons

Evaluator's perspective



How is exploitation Evaluated?

- Quality of the proposed measures to:
 - Exploit and disseminate the project results (including management of IPR), and to manage research data where relevant.





How is exploitation Evaluated?

- Please assess the quality of the draft Plan for Exploitation and Dissemination of the project results (PEDR) with respect to the specific measures to be implemented both during and after the end of the project
- Is a business plan included? Is that properly considering the competition, pricing, revenue streams and financial forecasts? Is this plan realistic?
- If applicable, is the strategy for the management of the IPR appropriate? Does it describe the main background IPR needed to carry out the project, its ownership and accessibility, authorisation to use Third Party rights, and the ownership principles that will govern the project results?



What are evaluators Looking for?

- Quantitative indicators with credible justification that your project will generate the necessary outputs and outcomes
- Specific figures, tailored plans
- New knowledge/innovation responding to specific end-user/societal needs
- Specific exploitation routes per partner
- Specific tasks and structures for exploitation and IPR management
- Measures to enhance wider uptake of results
- Extrapolation of impact to EU/global level
- Sustainability considerations
- Consideration of the entire supply/value chain



Legal considerations



What would you do if....

You want to convince an organisation to join your consortium, but that organisation may already be in a competitive proposal



You provide documents proving that your consortium is more competitive and has higher success chances



You ask the organisation to sign a non-disclosure agreement before sharing any relevant information



You invite the organisation on board as nothing restricts them from being a partner in two competing consortia



Non-disclosure agreement

- Define what constitutes confidential information
- Describe rules on communication, sharing information, confidentiality etc. (including scope and duration)
- Include restrictions on using confidential information and disclosing it
- Define penalties for breach of confidential obligations

NOW IT IS AGREED AS FOLLOWS:

1. Confidential Information

1.1 For the purposes of this Agreement, Confidential Information means any data or proprietary information of the Discloser that is not generally known to the public or has not yet been revealed, whether in tangible or intangible form, whenever and however disclosed, including, but not limited to:

- any scientific or technical information, invention, design, process, procedure, formula, improvement, technology or method;
- any concepts, samples, reports, data, know-how, works-in-progress, designs, drawings, photographs, development tools, specifications, software programs, source code, object code, flow charts, and databases;
- (iii) any marketing strategies, plans, financial information, or projections, operations, sales estimates, business plans and performance results relating to the



What would you do if....

You want to ensure partners are on the same page as to who develops and owns what during the project



The Coordinator has the authority to decide on the distribution of IPrelated rights



The H2020 AMGA defines all rights and obligations relating to IP



You ask your partners to sign a Memorandum of Understanding on Background and Results



Memorandum of Understanding

Provide a preliminary description of:

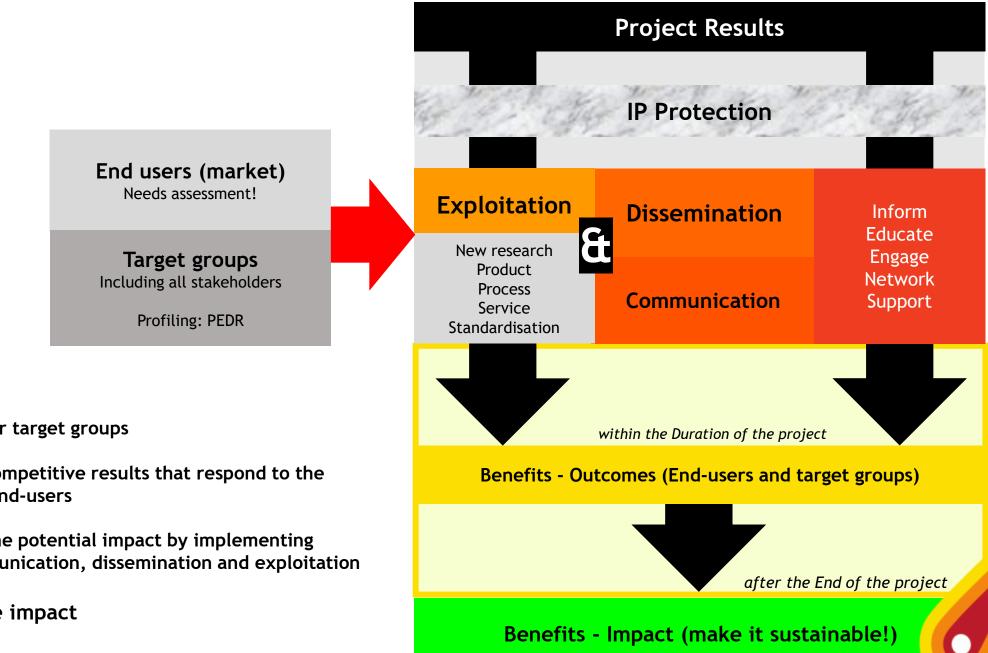
- Intended results;
- Division of tasks;
- Internal organisation and leadership roles;
- Project budget and distribution of EU funding;
- Rights and obligations related to background and results.

3. Negotiations of the Consortium Agreement

- 3.1. Provided that the Proposal has a positive evaluation and that the Parties are invited to negotiate the Grant Agreement with the European Commission, the Parties wish to collaborate with the purpose to conclude a Consortium Agreement before the signature of the Grant Agreement. The conclusion of such an agreement is dependent on the mutual consent and must be reduced to written form.
- 3.2. The Parties agree that the Coordinator shall be responsible for conducting the negotiations foreseen under clause 3.1. of this MoU & NDA.
- 3.3. The Parties agree that the negotiation of the Consortium Agreement will be based in the following principles:

Draft Consortium Agreement

To take away



In summary: 1) Analyse your target groups

2) Generate competitive results that respond to the needs of the end-users

3) maximise the potential impact by implementing tailored communication, dissemination and exploitation

= sustainable impact

Thank you for your attention!

Frosina Ilievska frosina.ilievska@europamedia.org



© Europa Media It is strictly prohibited to use or distribute the content and design of this presentation without Europa Media's prior consent.