

# Boost potential of Young Innovators to pioneer change in energy efficiency inside Danube Macroregion

# **DANUBE ENERGY +**

# **Training Scheme for Young Innovators**

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### **1** Executive summary

The report analyses the implementation of the Training Scheme by DE+ project partners. It addresses qualitative and quantitative findings with the aim of assessing the attainment of project specific objective **to boost Young Innovators towards Successful Ventures.** 

The training scheme, originally planned to start in early March 2020 for all PPS, was adapted to the circumstances of COVID-19 pandemic in the world at the time. The training methodology has changed from face-to-face to online mode, for some partners virtually overnight. All partners have postponed the Scheme in order to adapt. The move online has also necessitated adaptation of the planned hours of the training. The implementation went ahead, but not at the same time for all partners as originally planned. 6 out of 9 PPs have finished the Training Scheme before summer, while 3 (Slovakia, Slovenia and Ukraine) implemented it in the autumn. The report covers all the implementation data for all partners.

Within the Training Scheme, 66 project ideas were selected in the fields of environment (19), energy efficiency (13), circular economy (9), renewable energy (4), cleaner electricity (3), transport and energy (2) and other related fields. In many cases, these ideas were connected to more than a single young innovator. The ideas were in the middle of technology-driven vs. user-driven innovation. The variety of ideas is presented in the first part of the report.

Average YI that has benefitted from the Training Scheme is male, employed, 27 years old. Gender distribution of the YIs is heavily skewed towards the males: 65% of all YIs were male and 28% female; one person declared themselves male/female and YIs of the Czech Republic did now answer on the demographic data. Their occupational statuses are employed (31,25%), students (27,75%), or self-employed (15%). Others reported a combination of statuses of were out of work.

The training scheme took place in the duration of at least 40 hours and has consisted of online lectures, 1 on 1 mentoring, and homework. All schemes concluded with a demo day. The differences in the implementation of the program were mainly in the duration and the emphasis put on the several modules. The Tool (developed in previous RP) recommended 3 learning blocks: Problem discovery and Idea generation; Business Model Development; Sales and Pitching.

In-depth analysis of the Training Scheme, based on the YI feedback questionnaire analysis, shows that the **YIs assess the knowledge gained in the Scheme as excellent**. They have learnt about idea generation, business development and pitching and sales skills. The programmes fulfilled their expectations.

The YIs are slightly less confident they can now get an MVP (average assessment is 4,3 out of 5). The



main concerns of the YIs seem to be fitness of their ideas for market, having a good team and securing resources (the latter got the lowest grade, 3,68 out of 5).

The mentors have communicated clearly and stimulated further interest in the topic. Programme organisation is assessed as excellent (4,63 out of 5). The programme fulfilled the YIs expectations (4,25). The attendance has been as good as the circumstances allowed: two thirds of participants were present for over 75%. Of the Training Modules.

Overall, the YIs are now able to carry out the project in question and are willing to start a start- up. This is especially valid for males (average grade 4,63 out of 5, compared to 4,00 for females). The out of work and self-employed persons report the highest preparedness to undertake a new venture, followed by employed persons (there is little difference), while the student population repots the lowest level of preparedness.

It is important to note that we have only analysed the statements of intention, which are not necessary linked to outcomes. It would be interesting to see after some time, how many of YIs have established a venture.

Therefore, we deem the Training Scheme a resounding success in difficult times. Nonetheless, we acknowledge that the personal, physical workshops would have given the YIs different additional value. In the words of one of our YIs: "It was interesting to participate online but I still prefer in person lectures" (female student from Bulgaria, 22).



#### 2 Introduction

Danube Energy+ project tackles the need for change in regional ecosystems to support Young Innovators in transforming their disruptive ideas in the field of energy efficiency into ventures. Project's general objective is **to create an enabling environment**, **which will support Young innovators to pioneer a change in the energy efficiency area by setting up highly innovative start-ups in the Danube macro-region**. Area of energy efficiency was selected as a great challenge for the Danube region is sustainable energy, specifically energy efficiency area (identified in EU Strategy for the Danube region). The underlying rationale of the project was to join under-used resource of idea potential of young innovators with a field of significant importance for the region where the energy prices are high, primary energy imported, and the markets fragmented. The project has therefore focussed on two specific topics: young entrepreneurs and energy efficiency.

To prove impact, create good practice example and enable direct experience and learning interactions among ecosystem actors, **Danube Energy+ ecosystem Package including the Danube Energy+ Tool, was piloted in 9 regions**. The underlying aim of the Tool Pilot was to support ecosystem actors' knowledge in creating sustainable enabling environment for boosting YIs into starting ventures, prove tool's Impact and also directly boost knowledge and will of participating Young Innovators in the Pilot.

This report describes the implementation process of the Training Scheme at the project level. YIs in each region taking part in the Pilot of Danube Energy+ Tool directly benefitted from learning process within the pre-acceleration training scheme. The training scheme directly contributed to the Project Specific Objective 2: To boost Young Innovators towards Successful Ventures.

The timing of the Training Scheme coincided with COVID-19 pandemic. For this reason, the pilot training schemes did not run at the same time as originally envisaged. Many of the partners concluded their Training Schemes before summer period. However, three Training Schemes were partially or fully postponed until the autumn of 2020: the schemes in Slovakia, Slovenia, and Ukraine. The three PPs decided to implement the training scheme later to take account for the academic school year and potential obligations of the participants, COVID-19 situations in the countries and the availability of the lecturers and mentors. As soon as the start seemed reasonable for each PP, they implemented the Scheme. This is a finalised report covering all aspects of Training Scheme implementation in all countries.

The report is based on training reports of the partners (one per partner, where available) and the data provided by the partners regarding the ideas of the Young Innovators. It also includes feedback information gathered from the Young Innovators at the end of their training. The response rate for the questionnaire is unfortunately not 100%.



From the 66 YI ideas included in the report, we have gathered 81 responses in total. (The ideas were represented by either one YI or a team of YIs.) These individual responses represent 73% of all YI included in the scheme (the total number of the YIs: 111).

# 3 Training Schemes implemented

As a crucial part of DE+ project, **Young Innovations (YIs)** in each region took part in the Pilot of the DE+: the Training Scheme. By doing so, they benefitted from learning processes within the preacceleration scheme. The learning process included learning sessions run by mentors, improving YIs competence in the fields of business, legal, marketing /sales, human resources, competition, and start-up establishment. The aim was to increase the YIs' knowledge to start successful venture, thus contributing to the project specific objective 2 - to boost Young innovators towards their successful ventures.

The training scheme envisaged was elaborated in detail in the Application Form. It set out the planned duration (4 weeks), the number and duration of sessions per week (3 half-days), and its location (at the project partners premises or at Regional Alliance members offices). It was planned that learning materials and mentors will guide YIs through various parts of the learning scheme and help them gain relevant competences in the following: business / challenges in energy efficiency, competition, customer/market validation, business skills including marketing/sales, business modelling, team setting up and legal start-up issues. The learning methods to be used were both individual and team activities. Naturally, day-to-day support was planned; both in terms of specific content of the learning scheme and materials, as well as in terms of practical matters. Each of the PPs should have selected 10 YIs and provided them this innovative learning opportunity.

The implementation of the training scheme, due to start in early March for the majority of the PPs, coincided chronologically with COVID-19 pandemic. This has caused some changes in our approach. The PPs have decided to delay the training scheme for various amounts of time. In the end, the majority of work was gone online. In these circumstances, the originally planned hours of training did not seem appropriate in practice. Additional reasons for timing deviations, not originally foreseen, were the curricula of the higher education, vacations, other or similar running programs in the region. In the final instance, the consortium decided to provide as much flexibility as necessary as regards to the implementation of the pilot (e.g. trainings *en bloc* / during weekends / in the afternoon, ...), as long as its contribution towards the project specific objective is still present.

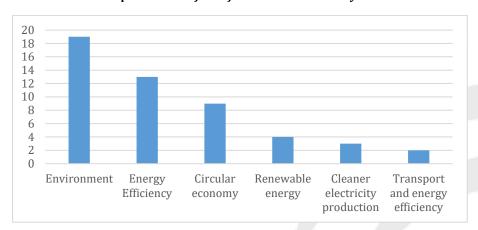
Therefore, the pilot training schemes did not run at the same time, but some started and finished earlier than others. The PPs used this as a valuable if not originally planned resource that enabled flexible transfer of good practices between us. However, it has also meant that Training Schemes in Slovakia, Slovenia, and Ukraine were partially or fully postponed until the autumn of 2020, to take account for the academic school year and potential obligations of the participants, COVID-19



situations in the countries and the availability of the lecturers and mentors. As soon as the start seemed reasonable for each PP, they started with the Scheme.

#### 3.1 Project ideas selected: An Overview

One of the key elements of the project and the training scheme was the initial supposition that YIs have many disruptive innovative ideas in the field of energy efficiency. This has proved to be easier done in some countries than the others. The graph below summarises the general field of YI ideas as assessed by the PPs (only the fields where more than one idea was chosen are included in the below graph).



Graph 1: General field of YI ideas as assessed by PPs.

The highest number of ideas, as classified by the PPs, was in the field of Environment, followed by Energy Efficiency. Those are indeed two strongly inter-connected topics. With energy efficiency, energy demand can be reduced, leading to lower energy bills for consumers, lower emissions of greenhouse gases and other pollutants, reduced need for energy infrastructure, and increased energy security through a reduction of imports and general positive impact for the environemtn.

All of the selected YI idea fields are connected to energy efficiency and more importantly, its impact: help in protecting the environment, mitigation of climate change, improve citizens' life quality and reduce the EU's reliance on external suppliers of oil and gas. The scope was therefore achived through the diversity of participating ideas that got to understand even better their impact on the environment and understand sustainability better (after all being energy efficient can also imply being sustainable).



Speaking practically, in the relatively narrow timeframe of identification and motivation of the potential YIs, it seems that Energy Efficiency has proved to be too narrow a field for some project partners. This applies most notably for those with smaller population and therefore smaller YI pools. Ideas, connected to circular economy, renewable energy, cleaner electricity production and similar were therefore also accepted in the programme on the basis of inter-connections of ideas.

It is assumed that the size of the pool of potential innovators (measured by size of the population), and regional specific industries of focus have an impact on how many ideas strictly related to the energy efficiency a PP can gather. In any future implementation of the scheme, it would be useful to widen the scope of the field to get more ideas or alternatively, to aim for lower numbers of YI included in the scheme – perhaps even such that reflects different pool sizes.

Full data on ideas is available in the table below.





Table 1: General field of the YI ideas in the training scheme, as assessed by the PPs

General field of idea	PP1 Germany	PP2 Bulgaria	PP3 Slovenia	PP4 Slovakia	PP5 Croatia	PP6 Czech Republic	PP7 Romania	PP8 Serbia	PP9 Ukraine	Grand Total
Environment	1	4		7		2	3	2		19
Energy Efficiency	1	1	2			2		1	6	13
Circular economy		1	3	1	1	1	1	1		9
Renewable energy	3				1					4
Cleaner electricity production		1					2			3
Transport and energy efficiency									2	2
IoT Infrastructure Monitoring						1				1
Server Latency and availability of the Cloud Services					1					1
Camera system	1									1
Digitalization							1			1
Sustainable bio farming		1								1
Electric Vehicle							1			1
Online board games						1				1
Sustainable farming		1								1
Renting						1				1
Board Games						1				1
Smart and efficient buildings & cities					1					1
Analytics of energy usage	1									1
Customer service					1					1
Health								1		1
Air flight control		1								1
Energy storage, smart electric grid			1							1
Grand Total	7	10	6	8	5	9	8	5	8	66



The project is posited on a hypothesis that YIs have important and ground-breaking ideas for which they lack the business skills or supportive environment; especially the latter can even cause brain drain. We were interested to see if YI ideas were based on something that can be done (so-called technology push, coming from their field of study) or something that users want (known as user pull, ideas based on what the users would want and therefore everyday life of the YIs).

For each idea, we have asked the PP whether they find the idea is technology or user driven. The responses were possible on a Likert scale from 1 (completely technology driven) to 5 (completely user driven). Based on PPs assessment, selected ideas were not particularly user- or technology driven but have sat quite remarkably in the middle of this continuum. PP Ukraine has assessed the most user-driven innovations included in the Training Scheme, while the Czech Republic and Serbia are leaning strongly towards technology driven innovation. In the table below, averages for the field are presented.

Table 2: YI ideas: doing it because they can be done (technology driven-1) or doing it because there is a market need (user driven-5)?

	PP1 Germany	PP2 Bulgaria	PP3 Slovenia	PP4 Slovakia	PP5 Croatia	PP6 Czech Republic	PP7 Romania	PP8 Serbia	PP9 Ukraine	Average
Environment	2,00	3,25		2,86		2,00	2,00	2,50		2,63
Energy Efficiency	1,00	3,00	2,00			2,50		2,00	4,67	3,31
Circular economy		3,00	3,00	5,00	4,00	2,00	4,00	2,00		3,22
Renewable energy Cleaner electricity	4,33				3,00					4,00
production Transport and energy		4,00					2,00			2,67
efficiency									3,50	3,50
Average for all topics	2,86	3,20	2,50	3,13	3,80	2,67	2,63	2,80	4,38	3,11



#### 3.2 Young innovators trained

Table 3: The number of perspons trained and the number of ideas

	PP1	PP2	PP3	PP4	PP5	PP6	PP7	PP8	PP9	Total
	Germany	Bulgaria	Slovenia	Slovakia	Croatia	Czech	Romania	Serbia	Ukraine	
						Republic				
N of persons trained	10	22	6	14	10	12	12	11	14	111
N of highly innovative	7	10	6	8	5	9	8	5	8	66
ideas created,										
developed and shared										

#### 3.3 Our average Young Innovator

From the feedback questionnaires of YIs, developed within WPT2.5, we can assess basic demographic information on YIs. These data are not complete because not all participants submitted the feedback questionnaires despite the best efforts of the partners (81 responses collected for 66 project ideas). It does, however, provide a snapshot of the energy efficiency young innovator in our training scheme with relatively high reliability.

The AF defined "young" as anyone below the age of 35; however, our **selected YIs were on average around 27 years old.** The only exception here is Germany, where the average age was slightly higher (31 years). This is due to the fact they have included in their programme two persons above the agethreshold. Furthermore, the calculations do now include the Czech Republic which did not gather demographic data.

**The YIs were predominantly male**: overall, there were 53 males (65,43%), 23 females (28,40%) and 1 (1,23%) female/male person responding to the questionnaire. 4 respondents from the Czech Republic did not provide demographic data (4,94%).



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Graph 2: Gender distribution of the participants in the YI Training Scheme.

YIs were either employed (31,25%), students (27,75%), or self-employed (15%). Further 3,7% of the YIs reported they were out of work/ unemployed. 13 persons reported a combination of their statuses (student / employed; student / self-employed and similar).



#### 3.4 Selected innovative project ideas by country

#### 3.4.1 PP1: InnoEnergy, Germany

For the training scheme, Germany selected 7 ideas (below) with the total of 10 young innovators.

**AirBox:** Generate energy from fresh air. The system will control wind velocity and flow towards a wind turbine to keep it constant, high and steady during all times of operation. This will produce an electricity output that is predictable, reliable and non-dependent on weather conditions. Airbox consists of an airflow unit responsible for generating a pre-determined (high) velocity, laminar and clean airflow opposed to a wind turbine, alongside sensors, controllers and actuators all enclosed together in a housing as one apparatus

**Discover/e** is a system that allows "charging communities" for e-cars and in order to do so it allows a cost-transparent sharing of charging stations, with main focus on multi storey housings.

*EaVy Systems* is creating a more efficient and effective world of urban fast charging by allowing electrical vehicle drivers to access fast charging in an easy, comfortable and highly flexible way. It allows to share a DC fast charger along an EV parking zone. One fast charging equipment can sequentially and automatically charge several electrical vehicles.

**EKOMO**: an innovative heating system for housings based on induction (-> induction heating). This heating is scalable, free of emissions, and does not require a chimney and can be connected to Smart Home / Smart Grid solutions.

*HyperSpecs* is an Artificial Intelligence powered hazard imaging camera that visualises gas leaks and toxic spills to make energy infrastructure safer for people and the environment.

**kola** is a tool for free online data analytics for load profiles for energy consultants. You can use it to analyse the load profiles and adapt your energy consumption behaviour accordingly.

**SenseING:** The main feature of this system is a needs-based identification and rapid deployment of I4.0 methods for monitoring environmental conditions by real data captured by sensors.



#### 3.4.2 PP2: Cleantech Bulgaria, Bulgaria

Bulgaria selected 10 applicants who presented 10 ideas.

*Hybrid energy systems* and automation addressing inefficiencies in buildings with centralized heating.

*Flowertising* – green advertising (arrangement of plants on vertical gardens in the shape of logos).

*IT Mobile* - Low toxic recyclable car batteries

**BUTMA** - Fully digitilized advanced air mobility and airspace traffic management tool - a sharing system speeding the process to up to minutes relieving both the authorities and the operators. Communication channel between authorities/air traffic controllers/drone operators in case of need. Security and Safety boost sharing flight data with whom has right to view it.

**Commuty** - Car sharing services app to provide to citizens living and working in the urban areas and outskirts.

**Gordost na fermata (Pride of the farm)** - A solar dehydrator for fruits and vegetables with rapid removal of moisture at a regulated drying temperature of up to 58 degrees Celsius is under development.

**Hec Solar - SUSTAINABLE LIVING BOX -** Sustainable living box that includes accessories one can use for office life instead of plastic: Bamboo cup, lunch jar, bamboo straw, big size textile bag, 5 x netting (see-through) bags /for fruits and vegetables/, which can be easily carried anywhere and being used again and again.

**InnoFarm** - Producing leafy greens vegetables in a sustainable and innovative fashion by growing them in controlled environment (vertical farming) while having a clean production free of pesticides, locally grown.

*Sun Power Invest* - A platform, that will be able to buy solar PV in big quantities, with better prices. And will offer a FREE installation of 5-30kw to any home - supporting all families with solar energy.

*Utilaste* - Large electricity and soil producing composter

#### 3.4.3 PP3: Civitta, Slovakia

Slovakia selected 8 ideas.

"Rain Garden" - solution addressing the problem of rain water which ends up in canalization and sewers and further in rivers. Garden represents an affordable solution so that rain water from unpermeable surfaces can end up in the soil. Project operates as non-profit.

**EcoLove** - reusable cups which can be used more than 100 times and can be further recycled at the end of their life cycle

Students' project delivering solution based on planting fast-growing trees.



Project offering legal consulting to companies in the area of waste management. Consultancy provided in order to help companies to follow the path of circular economy in terms of their waste management.

**Aeroponics for home** - creation of aeroponic system for home usage in order to produce high quality home-made food

**Veggie Town** - Zero waste fast food aiming to sell baked veggies to go (sourced from local farmers), preferably in edible or compostable boxes alongside running educational activities about sustainability

**Pomoduomo** - wooden geodetic greenhouse with automated solar irrigation system and automated ventilation

*Nature online* - smart app providing visitors of national nature parks and other nature sited with an insight of what can be seen

#### 3.4.4 PP4: ABC Accelerator, Slovenia

Slovenia selected 6 teams and a total of 6 YI.

**Modular gardens** To create a technologically, energetically and sustainably sophisticated product for modular houses (or just a product alone), which will support the circular economy and further contribute to the company's philosophy and strengthen the community and support local economy

#### Electricity network stability

The problem is to realize the green deal ENTSO-E in their Ten-year network development plan 2020 are saying that the cross border capacity will increase up to 35 GW by 2025 and additional 93 GW by 2040. That would impose issues network stability. Because of before mentioned problem the combination of battery storage and power to heat or power to gas is a necessity.

#### New material as end product and art form:

To solve the problem of waste production and plastic packaging, we would like to combine two raw materials that end up as waste, into new biodegradable material which could replace plastic packaging.

**Homes for all:** to make energy efficient housing more affordable, primarily for those who wantto live sustainably and in a healthy indoor environment. Sustainable housing solutions like passive houses are generally a bigger investment. This presents a big barrier to entry, especially for younger people who are just entering the housing market but struggle to afford a sustainable and energy efficient house.

#### Grape waste made into new material

To solve the problem of grape waste (a by-product of grape juice), which could be used in a new material.

New photovoltaic cell -more efficient and cheaper



#### 3.4.5 PP5: Optimizacija, Croatia

Croatia selected 5 ideas with a total of 10 individuals for the Pilot.

**GAME X** - We are planning to set up a platform that would make possible to connect Hardware provider to a Client that needs a Hardware strength

*i-Strukt: Smart Designer -* Automated design for buildings. Possibility for professionals to make easy their chose for design, as well as for Developer and Investors.

schpitza - new platform which connects restaurants, bars, etc., with end users

*Sizif* - speeding up the employment process by eliminating face to face or over the phone preselection with each candidate and giving the user the most compatible candidates for the position they are hiring for

*Clever Building Design* - Production and processing of materials for ecological construction on the basis of raw material - industrial hemp, upgraded with modern technology of today and European certified. Use of materials that are produced as by-products in the agricultural industry. Improving the energy efficiency of existing buildings, creating a low carbon future. Building eco- friendly buildings, renting them for tourism homes (Smart Homes or Passive Solar Houses), in principle turnkey.

#### 3.4.6 PP6: E-Klastr, Czech republic

In Czech Republic 9 teams participated at the Demo Day although a list of innovators first selected included 12.

**B2B Freezer** renting with full service + Vending machines with COVID19 prevention materials (face masks, disinfectant etc) for train stations.

**Board game** for connecting the blind with the seeing. Based on item recognition. Helpful for families with blind members, but also exciting for everyone else.

Board games oriented at strategy and logic solving. Set of 100s of online games.

*Concrete monolith bench* with integrated solar panel providing power for charging or Wi-Fi. Useful as part of the city inventory.

*Drones as alternative to fireworks*. Coordinated clusters of 10s to 100s to 1000s of autonomous drones flying and being lit up to emulate fireworks.

*IoT implementation of transport infrastructure safety.* Monitoring of tram lines, tracks and other parts of not-only-public transport.

*Multimodal transportation* relying on connection of taxis to public transport. B2B oriented platform.

*Vending machine for lightbulbs*. Combined with a returning spot for dead lightbulbs and other light fixtures. Key is availability 24/7 and proximity to people.



*Vermicomposting* in a bench. Usable on a apartment balcony or a city park.

#### 3.4.7 PP7: Asociatia Centrul Startup Transilvania, Romania

Romania selected 8 ideas and a total of 12 young innovators.

**BILLIT** is a digital shopping voucher which aims to completely eliminate printed receipts, which involve an additional cost for retailers and is a non-recyclable waste for the consumer. Billit's goal is to digitize all receipts and virtually store them so that consumers can easily track their expenses.

**ECOCYCLING** wants to develop an electronic waste recycling factory, coupled with a consumer application through which, using gamification methods, to increase the recycling level of this type of waste.

**EVOLTA** aims to develop the first network of fast charge stations for electric cars in Galați and Brăila (southern region of Romania). The team is working on developing their own EV changing station model, and will soon be installing their first station to test their product.

**FERMIERUL 4.0** is building a mobile aquaponics self-sustaining system for the HoReCa industry. Using this system, restaurants will be able to grow fresh food on their own, throughout the year, in a sustainable way: fresh-water fish (in pools created within the restaurants' premises) and fresh greens in a hydro-bed system. For low energy consumption, solar panels can be added

**HYDROGEN PVC**: a home heating system, developed by Ionuţ Procop, which uses hydrogen to decarbonize the electricity grid. He proposes an integrated system, using electrical panels for the energy needed in the electrolysis of water, with the help of which consumers can have complete autonomy for their energy needs, regardless of the type of weather, at low costs;

**SLICK:** the prototype for an electric motorcycle with an electric engine for each wheel. Ionel Chereja, the developer of SLICK, is building his own version of electric motor so that it can be mounted on each wheal of the e-motorcycle. SLICK is currently in prototyping phase, the built of the first e-motorcycle being under way. The goal of the project is to reach full production capabilities for the global market.

**SOLAR CHAIR** is a social project developed by Luminiţa Vlaicu who is building a wheelchair for people with disabilities, set in motion with the help of solar energy. Solar Chair aims to replace electric wheelchairs, charged from the grid, with ones powered by solar power and build it in such a way that prices remain affordable. Currently the project is in prototyping phase, with the first chair being assembled.

**TAPOHUB:** Adrian Pop and his team are in the testing phase, at the National Institute of Aerospace Research, of a new model of wind energy generator (wind turbine), of small dimensions. It was designed to be used mainly in agriculture, in order to reduce energy consumption in crop irrigation. The solution can also have residential use.





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#### 3.4.8 PP8: SEE ICT, Serbia

Serbia selected 5 teams with a total of 11 Young Innovators.

**Biotech Energy** - Soilab is a biotechnological startup focused on development of advanced microbial products intended for sustainable and organic agriculture. It provides higher efficiency, lower application frequency, better water retention in the soil leading to direct economic savings and reduction of the required labor.

**DentaLog** team is developing a mobile application for scheduling dental appointments. The customers can fix their teeth, increase their life quality by saving their money.

*Green Danube District* is developing floating pant boxes made of recycled materials. In this way they are providing a closed circle system of nutrition for plants and fishes.

**MasX** is developing an innovative way of producing reusable face masks. The masks can be used daily and they are made out of recyclable materials, forming the structure in a way to reduce material consumption too.

**SEENRGyStorage** team is developing a web platform for market and risk optimization in energy planning. The platform is related to storage from renewable - solar energy, with an emphasis on the evaluation of system services and minimising the risks.

#### 3.4.9 PP9: European Initiatives Center, Ukraine

Ukraine selected 8 ideas.

**Autonomous stop** with landscaping and electric charging station

*Cognitive quest game "Alternative energy"* (quest / game for pupils and students) on energy efficiency)

*Innovative autonomous mobile energy system for summer cottages,* placed on a trailer, adapted for the needs of the economy and for energy efficiency

*Innovative flood control electric power system:* The Protecting of the areas from the negative effects of floods and generating hydropower, without creating a dam

*Innovative system / device for heating water with electric current* without using direct current from solar panels without an invector / battery

*Innovative three-wheeled e-scooter* with increased cross-country capability and safety system. More complicated wheel and electric motor

**Smart energy application**, which provides an opportunity to monitor the condition of electric tools in the house. Furthermore, the app provides an opportunity to monitor electricity consumption.

*T-scooter with increased cross-country capability*. We've done bigger wheels to make the escooter more trafficable and the driving experience smoother. We use better battery for longer driving and powerful motor-wheel for higher speeds and going up the hills. Also, we have done other smaller changes into the scooter.



# 4 Training Scheme implementation: An Overview

The training scheme was scheduled to be implemented after the Open call conclusion and to run parallel in all PP countries for 4 weeks, during 3 half-day sessions in the premises of PPs or regional alliance members. The Tool Pilot will mix both individual and team activities throughout the whole Pilot duration. Day-to-day support was to be provided to all partners during the Pilot, both in terms of specific content of the learning scheme and materials, as well as in terms of practical matters.

When the COVID-19 situation arose, this meant a relaxation of this approach in order to achieve the overall objective. The timing of the training scheme was selected by the PP, to take account of the national variations, and the tools used also varied. Key information is presented on the table below.

Table 4: Key dates of the Training Scheme per country

PROJECT	PROGRAM	MENTORING	DEMO DAY	TOOLS USED	HOMEWORK	TOTAL	
PARTNER						HOURS	
GERMANY	17.0320.03.2020	23.03	23.04.2020	Microsoft Teams,			45
	38 academic hours	22.04.2020		Zoom	Yes		
BULGARIA	10.4., 13.4, 16.4, 24.4. , 2020	29.4.2020	30.4.2020	Google Hangouts,	12		
	24 full hours			Zoom, Miro			40
SLOVENIA	14.9., 15.9., 17.9., 18.9. 21.9., 22.9	individual	Late October	Slack, Zoom	Yes, via Moodle		40
CROATIA	15.6, 16.6., 17.6. 34 full hours	18.6.2020	19.6.2020	Zoom	Yes		40
CZECH REPUBLIC	17.619.6.2020 22.723.7.2020 22 full hours	Part of the program	23.7.2020	GoToMeeting + Physical meetings	Yes		40



# **Danube Energy+**

ROMANIA	13.5.2020 -27.5.2020 26	Individual	29.5.2020	Zoom, Canvanizer, WhatsApp	Yes	40
SERBIA	8.7. – 21.7.2020 20	Group and individual	21.7.2020	Zoom, Miro, Google Hangouts	Yes	40
UKRAINE	29.0718.11.2020 32 full hours	29.07.2020, 5.08.2020	26.11.2020	Zoom	Yes	



The differences in the implementation of the program were mainly in the duration and the emphasis put on the several modules. Most partners followed the proposed scheme: theory sessions + workshops and coaching sessions, concluded by demo day. However, some partners decided to implement coaching sessions within the duration of the program, i.e. parallel sessions, whereas some partners decided to implement the coaching sessions after the theory sessions were concluded. This has impacted the duration of the training scheme.

All partners used the Danube Energy+ Tool, developed within WPT.1, as a guide as to how to structure the program. The Tool recommended 3 learning blocks:

- Problem discovery & Idea generation;
- Business Model Development;
- Sales and Pitching.

Within the 3 learning blocks, the Danube Energy+ Tool suggested several different topics, covered in the duration of 40 hours, over the course of 4 weeks:

- specifics of business in energy efficiency,
- current networks, challenges and opportunities in the field
- competition analysis and advantage,
- customer/market validation,
- business skills including marketing/sales,
- business modelling,
- team setting up and
- legal start-up issues.

It must be noted that the tool was designed for physical workshops. However, due to the Europe's wide ban of gatherings, a vast majority of the program was de facto implemented online. Virtual trainings have their own logic however, and the structure of the work was adapted to any mode that led to the contribution to the final objective – to push YIs towards successful ventures. The experience of partners shows that while it is possible to effectively learn at workshops for 6-8 hours per day, the same intensity is unwise in virtual environment and participants manage less. Therefore, the majority of the workshops was between 5 and 6 hours of length. Consequently, the duration of lectures was shortened, and most of the partners delivered the program in less than 4 weeks' time.

#### 4.1 A short overview of the training schemes by country

**PP1, Germany,** selected its topics for the pilot as predefined by the Deliverables and Outputs of WPT1. In order to maximise the impact for the Young Innovators, they have also engaged the participants in bilateral discussions to indicate the topics that are the most important for them.



Accordingly, the pilot was focusing especially on these topics, but still covering all topics elaborated in WPT1. They covered the following topics: Problem discovery and idea generation, One Pager, Vision, Milestones, Needs & Expectations, Development of Business Models, define your customer, value proposition, customer interviews, core activities, value network, value creation, value delivery, market potential, competition analysis, storytelling, pitching, elevator pitch.

**PP2, Bulgaria** performed an initial scanning of the applications that showed that the applications were a mix of individuals and teams. Given the maturity of most of the applicants, it was decided to not focus as much on the Idea Generation. They covered these topics: Introduction of program and synchronizing expectations, Roundtable icebreaker: getting to know each other, Problem Statement, Customer discovery + segmentation, Value proposition, Motivational start-up presentation, Minimum Viable Product, Hypothesis testing, Create a business model for your idea through the lean method, Competition analysis, Funding for start-ups: glossary, Business roadmap, Pitch deck presentation structure, A good pitch structure: PitchDeck, Start-up presentation: TokWise, Working on pitchdecks.

**PP3, Slovenia** focused on Pitching, Energy Efficiency, Problem Statements, Lean Start Up Methodology, Value proposition, Team Development, and Business Canvas. Additionally, mentors were assigned based on the idea that each participant decided to develop. Each participant was also connected to at least one relevant stakeholder from the relevant ecosystem.

**PP4, Slovakia**, focused on Validation of the problem and the solution, Business Model Canvas, Basic Company Finance and Pitching and Presentation Skills. Networking events were held with Energy specialists and with ecosystem actors to understand funding options for early-stage projects. Individual mentors with entrepreneurial expertise were assigned to each project to coach them and share their experiences.

**PP5, Croatia:** covered the following topics: Scamper practice, SWOT Analysis, Idea Generation, Access to Finance, Team and project Management, B2B Sales Strategies, Risk Matric, Project Stakeholders, Business Modelling, Project Development, Pitch Training.

**PP6, Czech Republic,** was the only one of the partners that decide to implement part of the program physically. Their program was designed for start-ups that only had an initial idea. Their program included the following topics: Introduction to the program and to the partner, Initial Business Model Development: problem-solution, MVP; Continued Business Model Development: stable and financially viable business model, Market Opportunity Analysis, techniques of involving the customer's usage; Business Model tuning, Presentation, Pitch training, Networking training.

PP7, Romania, reviewed the applications selected into the program and tried to adapt the suggested



program to their individual needs. It was decided that Business Development was the most essential based on the applications received. They covered the following topics: administrative (schedule of Pilot, expectations from participants), trajectory of a start-up in a digital world, Ideation workshop, Lean Startup Methodology, what is an MVP and how to build it, Business Priorities, , Product-Market Fit, Value Proposition Design Tool, : How to phase your business development based on the Lean Startup model, Pitching, Elevator Pitch, Business Development 1 on 1 (coaching sessions).

**PP8, Serbia** covered the following topics: Introduction of the program, the team and mentors, Get to know the participants and their expectations, What is a Startup (differences between a big company and SME) Problem discovery, Ideation workshop, Customer persona Canvas, Motivational startup presentation, The Mom test, Letter of Intent, Lean Canvas Methodology, Business model Canvas, Team building and management, MVP, Competitive landscape, Go-to-market strategy, Roadmapping, IP and legal aspects of startup, Finances and Investments, Startup story - Development phases, Pitch deck structure, Pitching Training.

**PP9, Ukraine** also reviewed the applications selected into the program and tried to adapt the suggested program to their individual needs. It was decided that Business model Development was the most essential based on the applications received. They covered the following topics: key partners definition, trajectory and functioning of a start-up in a digital world, competitive advantages development, what is an MVP and how to build it, target groups specification, Elevator Pitch, Lean Startup Methodology, Product-Market Fit, Value Proposition Design Tool: How to phase your business development based on the Lean Startup model, Pitching, Market Opportunity Analysis, B2C Sales Strategies, Risk Matrix.

#### 4.1.1 Day-to-day implementation and support

All partners used a combined methodology of lectures, mentorship, and homework.

Most partners offered day-to-day support to young innovators via e-mail and a possibility of communication via phone. Slovenia additionally chose Slack channel for faster communication and Bulgaria created an informal WhatsApp group for all the participants.

Czech partners also reported that the trainees requested help with transportation to the location of the Demo Day (they were the only partner to organize a Demo Day in person, not online).

#### 4.1.2 Location of Training Scheme implementation

Pilot for the Danube Energy+ was scheduled to take place in March, just as the first wave of the new

A stream of cooperation

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COVID-19 virus was causing European countries to enforce more or less strict rules about public gatherings. Partners opted for different approaches – some postponed the pilot, while others implemented it online during the days when it was first planned. With the exception of the Czechs, all partners ultimately chose to have the lectures, workshops, mentoring hours and the Demo Day Online. The vast majority of partners used Zoom as the main tool to execute the pilot. Some partners also used Google Hangouts or some other platform that enables video and audio participation of several participants.



# 5 Pilot implementation: in-depth analysis

All partners were required to collect a formal feedback of the participants, using the feedback questionnaires provided by the WP leader – ABC Accelerator within the work package in RP3 (several months before the actual Training Scheme started).

In the final stages of Training Scheme implementation, partners have collected the feedback from the participants. Some opted to distribute the word questionnaire originally prepared, while others have used the also prepared Google forms (<a href="https://forms.gle/McqCT22NZTPJCALE9">https://forms.gle/McqCT22NZTPJCALE9</a>). The data gathered was joined and analysed by WP leader.

The below analysis includes the feedback from 81 young innovators that have responded to the questionnaire. Additionally, all partners collected informal feedback from the participants during the Training Scheme implementation and later. Where appropriate, these are included in the below section.

As the assumption of the project is that the YIs have great ideas, but are lacking in knowledge, we investigated YI's perception of expertise transferred in the Training Scheme. **Overall, the assessment of the knowledge provided is excellent.** 



# 5.1 YIs are highly satisfied with the level of knowledge provided in the Training Scheme, which has stimulated their further interest in the topic

The YIs were extremely satisfied with the level of information provided by the mentors. Averages of agreement with "Mentors have sufficient information to us"? (1-strongly disagree, 2 - disagree, 3 - neutral, 4- agree, 5 - strongly agree)? are very high.

Table 5: YIs' (average) assessment on information provided by the mentors by PP.

PP1 Germany	4,17
PP2 Bulgaria	4,36
PP3 Slovenia	4,33
PP4 Slovakia	4,64
PP5 Croatia	5,00
PP6 Czech Republic	4,75
PP7 Romania	4,67
PP8 Serbia	4,73
PP9 Ukraine	3,94
<b>Grand Total</b>	4,45

Assessment of communication efficiency is even slightly higher, which is an especial achievement in the light of the online tools used by all partners to some extent. YIs were asked the following: Do you agree with the statement "Mentors communicated effectively"? (1-strongly disagree, 2 - disagree, 3 - neutral, 4- agree, 5 - strongly agree)?

Table 6: YIs' (average) assessment on efficiency of communication by the mentors by PP.

PP1 Germany	4,67
PP2 Bulgaria	4,83
PP3 Slovenia	4,33
PP4 Slovakia	4,73
PP5 Croatia	5,00
PP6 Czech Republic	5,00
PP7 Romania	4,67
PP8 Serbia	5,00
PP9 Ukraine	3,88
<b>Grand Total</b>	4,60

Furthermore, the YI interest in the topic has been stimulated by the Training Scheme.



Table 7: YIs' (average) assessment on stimulation of interest in the topic by the mentors by PP.

PP1 Germany	4,40
PP2 Bulgaria	4,42
PP3 Slovenia	4,00
PP4 Slovakia	4,18
PP5 Croatia	5,00
PP6 Czech Republic	4,50
PP7 Romania	4,56
PP8 Serbia	4,82
PP9 Ukraine	4,06
<b>Grand Total</b>	4,39

Similar grades were given to the stimulating learning environment. Below are the averages of agreement with the statement "Mentors created a stimulating learning environment"? (1-strongly disagree, 2 - disagree, 3 - neutral, 4- agree, 5 - stronglyagree).

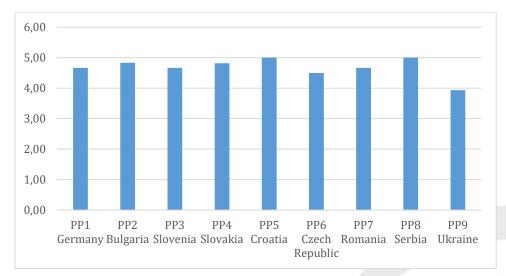
Table 8: YIs' (average) assessment on stimulating learning environment by PP.

PP1 Germany	4,17
PP2 Bulgaria	4,42
PP3 Slovenia	3,83
PP4 Slovakia	4,27
PP5 Croatia	5,00
PP6 Czech Republic	4,50
PP7 Romania	4,56
PP8 Serbia	4,55
PP9 Ukraine	4,31
<b>Grand Total</b>	4,38



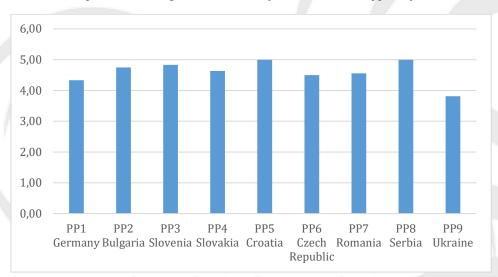
#### 5.2 Organisation of the Training Scheme

Overall, the programme received remarkably high assessment of the **programme organisation**. The YIs were asked "Do you agree with the statement "The programme was well organised"? (1-strongly disagree, 2 - disagree, 3 - neutral, 4- agree, 5 - strongly agree)".



Graph 3: The average YI assessment of programme organisation by PP.

Assessment of the **administrative support** was also good. The YIs provided answers on a Likert scale (1-strongly disagree, 2 - disagree, 3 - neutral, 4- agree, 5 - strongly agree).



Graph 4: The average YI assessment of administrative support by PP.



The lowest assessment was given to the **lecture rooms**, where average given was 4,40 (ranging from 3,67 in Germany to 5,00 in Ukraine and Croatia). However, these should be taken with a grain of salt, since all programmes except Czech ones were carried out online and it is not really clear what the YIs really assessed – possibly the online tool. This is a reflection of the fact that the questionnaires were prepared well before the Training Scheme took place.

Overall, the **Training Scheme fulfilled the expectations of the YIs**. The level of this fulfilment is slightly higher for female participants than for males, as can be seen from the table below:

Table 9: Agreement with the statement "The programme fulfilled my expectations" by PPs.

PP	Female	Male	Female, Male	n/a	<b>Grand Total</b>
PP1 Germany		4,00			4,00
PP2 Bulgaria	5,00	4,22			4,42
PP3 Slovenia	3,67	4,33			4,00
PP4 Slovakia	4,33	3,60			4,00
PP5 Croatia		5,00			5,00
PP6 Czech Republic				4,50	4,50
PP7 Romania	4,50	4,00			4,11
PP8 Serbia	5,00	5,00	5,00		5,00
PP9 Ukraine	3,60	3,82			3,75
<b>Grand Total</b>	4,30	4,19	5,00	4,50	4,25

68% of the Young Innovators attended the program in at least 75% capacity, with a third claiming to attend 100% of the programme.



# 5.3 The YIs gained important new knowledge....

The Training Scheme provided important new knowledge to the participants. In all PPs, the agreement with the statement "The programme provided me with new knowledge" is remarkably high with no important differences in gender.

Table 10: Agreement with the statement "The programme provided me with new knowledge"" by PPs and gender.

	Female	Male	Female, Male	n/a	Grand Total
PP1 Germany		4,67			4,67
PP2 Bulgaria	4,67	4,44			4,50
PP3 Slovenia	3,67	4,33			4,00
PP4 Slovakia	4,67	4,00			4,36
PP5 Croatia		5,00			5,00
PP6 Czech Republic				4,50	4,50
PP7 Romania	4,50	4,43			4,44
PP8 Serbia	5,00	5,00	5,00		5,00
PP9 Ukraine	3,20	3,55			3,44
<b>Grand Total</b>	4,26	4,35	5,00	4,50	4,34



The YIs have learnt about the idea generation process (average assessment 4,31), business model development (4,43) and pitching and sales skills (4,36).

Table 11: Idea generation, business development and pitching - assessment of knowledge by gender

Statement (average agreement)	Female	Male	Grand Total
I have learned about <b>idea generation</b> process.	4,26	4,33	4,31
I have learned about <b>business development</b> process.	4,48	4,38	4,43
I have learned about pitching and sales skills.	4,30	4,37	4,36

Table 12: Agreement with the statement "The programme provided me with new knowledge"" by PPs and employment situation of YIs.

	Employed	Out of work	Self-employed	Student	Grand Total
PP1 Germany		5,00	5,00	4,00	4,67
PP2 Bulgaria	4,80		3,00	4,60	4,50
PP3 Slovenia	3,00			3,67	4,00
PP4 Slovakia			4,25	4,60	4,36
PP5 Croatia	5,00	5,00		5,00	5,00
PP6 Czech Republic				,	4,50
PP7 Romania	4,40		5,00	4,00	4,44
PP8 Serbia	5,00		5,00	5,00	5,00
PP9 Ukraine	3,78		3,00	3,50	3,44
Grand Total	4,29	5,00	4,42	4,39	4,34

The persons out of work have assessed the **provision of new knowledge** the highest (5,00) and the employed the lowest (4,29) – however, the average grade was still high 4,34. This also applies to specifics of knowledge obtained: idea generation, business model development, and pitching and sales skills. All these specifics are also assessed favourably, they strongly agree with these statements (as seen from tables on the next page).



Table 13: Agreement with the statement "I learned about idea generation process" by PPs and gender of YIs

	Female	Male	Female, Male	n/a	<b>Grand Total</b>
PP1 Germany		4,17			4,17
PP2 Bulgaria	5,00	4,44			4,58
PP3 Slovenia	4,67	4,33			4,50
PP4 Slovakia	4,50	4,00			4,27
PP5 Croatia		5,00			5,00
PP6 Czech Republic				4,25	4,25
PP7 Romania	4,00	4,29			4,22
PP8 Serbia	4,75	4,50	5,00		4,64
PP9 Ukraine	3,00	4,09			3,75
<b>Grand Total</b>	4,26	4,33	5,00	4,25	4,31

Table 14: Agreement with the statement "I learned about business model development" by PPs and gender of YIs

	Female	Male	Female, Male	n/a	<b>Grand Total</b>
PP1 Germany		4,17			4,17
PP2 Bulgaria	5,00	4,56			4,67
PP3 Slovenia	5,00	4,00			4,50
PP4 Slovakia	4,33	4,00			4,18
PP5 Croatia		5,00			5,00
PP6 Czech Republic				4,50	4,50
PP7 Romania	4,00	4,57			4,44
PP8 Serbia	5,00	4,83	5,00		4,91
PP9 Ukraine	3,80	4,00			3,94
<b>Grand Total</b>	4,48	4,38	5,00	4,50	4,43

Table 15: Agreement with the statement "I learned pitching and sales skills" by PPs and gender of YIs

	Female	Male	Female, Male	n/a	<b>Grand Total</b>
PP1 Germany		4,33			4,33
PP2 Bulgaria	4,67	4,11			4,25
PP3 Slovenia	4,33	4,67			4,50
PP4 Slovakia	4,33	4,00			4,18
PP5 Croatia		5,00			5,00
PP6 Czech Republic				4,50	4,50
PP7 Romania	4,50	4,43			4,44
PP8 Serbia	4,50	4,67	5,00		4,64
PP9 Ukraine	3,80	4,18			4,06
<b>Grand Total</b>	4,30	4,37	5,00	4,50	4,36



# 5.4 ... but are worried about fitness for market, having a good team and securing resources.

Table 16: YI's initial ideas - self assessment of the market fit by PP and gender.

	Female	Male	Female, Male	n/a	<b>Grand Total</b>
PP1 Germany		4,33			4,33
PP2 Bulgaria	3,33	4,56			4,25
PP3 Slovenia	3,00	3,67			3,33
PP4 Slovakia	4,33	4,20			4,27
PP5 Croatia		5,00			5,00
PP6 Czech Republic				3,75	3,75
PP7 Romania	3,50	4,14			4,00
PP8 Serbia	3,75	4,50	4,00		4,18
PP9 Ukraine	3,80	3,91			3,88
<b>Grand Total</b>	3,74	4,24	4,00	3,75	4,06

Interestingly, females assess the market fit of their ideas lower than males. The average overall assessment is 4,06 for both genders – but 3,74 for females and 4,24 for males. There is however little difference in their assessment of having a good team.

Table 17: YI's initial ideas - self assessment of their team by PP and gender.

Row Labels	Female	Male	Female, Male	n/a	<b>Grand Total</b>
PP1 Germany		3,83			3,83
PP2 Bulgaria	4,33	4,33			4,33
PP3 Slovenia	3,67	1,67			2,67
PP4 Slovakia	4,17	4,00			4,09
PP5 Croatia		5,00			5,00
PP6 Czech Republic				4,00	4,00
PP7 Romania	4,00	4,14			4,11
PP8 Serbia	4,50	4,50	3,00		4,36
PP9 Ukraine	4,00	4,36	The Contraction of the Contracti		4,25
<b>Grand Total</b>	4,13	4,12	3,00	4,00	4,10

The lowest assessment grades were given for YI's self-assessed ability to secure resources. This was the only assessment where an average grade less than 4 was given.



Table 18: YI's self-assessment of the ability to secure resources by PP and gender.

Row Labels	Female	Male	Female, Male	n/a	<b>Grand Total</b>
PP1 Germany		3,50			3,50
PP2 Bulgaria	2,33	4,00			3,58
PP3 Slovenia	3,00	2,33			2,67
PP4 Slovakia	3,33	3,80			3,55
PP5 Croatia		5,00			5,00
PP6 Czech Republic				3,50	3,50
PP7 Romania	4,00	3,29			3,44
PP8 Serbia	4,00	4,33	4,00		4,18
PP9 Ukraine	3,80	3,91			3,88
Grand Total	3,43	3,80	4,00	3,50	3,68

This seems to be one topic where more knowledge and practical experiences would be useful. From the experience of the authors (PP3 Slovenia), we have received the lowest grade here even though we have offered participants training on both gathering investments from the VCs from one of the best lecturers in the region and offered knowledge on public grants, too. It seems that perhaps more practical knowledge would be of use.



#### 5.5 Are the YIs willing to establish their company? A decisive YES - from males

The most important outcome of the training scheme is the willingness of the YIs to establish their own company. As a proxy for this, we have first measured the YI feeling they are **able to carry out the project in question**. The overall feeling of the YI competences is high, but higher for males than females.

Table 19: YI's agreement on being able to carry out the project in question by PP and gender.

	Female	Male	Female, Male	n/a	<b>Grand Total</b>
PP1 Germany		4,33			4,33
PP2 Bulgaria	3,33	4,22			4,00
PP3 Slovenia	3,67	4,33			4,00
PP4 Slovakia	3,83	4,40			4,09
PP5 Croatia					n/a
PP6 Czech Republic				4,50	4,50
PP7 Romania	4,00	4,57			4,44
PP8 Serbia	4,25	4,50	4,00		4,36
PP9 Ukraine	4,20	4,18	_		4,19
<b>Grand Total</b>	3,91	4,34	4,00	4,50	4,21

The self-employed are the most confident about their abilities (4,50), followed by the students (4,14) and the employed (4,04).

But what is the actual intention to create a start-up? Overall, **YIs report high levels of willingness but with significant gender differences**:

Table 20: YI's agreement on willingness to establish their own start-up by PP and gender.

Row Labels	Female	Male	Female, Male	n/a	<b>Grand Total</b>
PP1 Germany		4,83			4,83
PP2 Bulgaria	4,00	4,78			4,58
PP3 Slovenia	2,67	5,00			3,83
PP4 Slovakia	4,33	4,40			4,36
PP5 Croatia		5,00	The second second		5,00
PP6 Czech Republic				3,75	3,75
PP7 Romania	3,50	4,86			4,56
PP8 Serbia	4,50	4,67	4,00		4,55
PP9 Ukraine	4,20	4,09			4,13
Grand Total	4,00	4,63	4,00	3,75	4,40



The differences in the willingness are also shown in different occupational statuses:

Table 21: YI's agreement on willingness to establish their own start-up by PP and occupational status.

	Employed	Out of work	Self-employed	Student	n/a	<b>Grand Total</b>
PP1 Germany		5,00	4,67	5,00		4,83
PP2 Bulgaria	4,40		5,00	4,80		4,58
PP3 Slovenia	5,00			2,67		3,83
PP4 Slovakia			4,50	4,40		4,36
PP5 Croatia	5,00	5,00		5,00		5,00
PP6 Czech Republic					3,75	3,75
PP7 Romania	4,80		5,00	2,00		4,56
PP8 Serbia	5,00		4,00	4,25		4,55
PP9 Ukraine	4,00		4,00	4,50		4,13
<b>Grand Total</b>	4,46	5,00	4,58	4,22	3,75	4,40

The highest level of agreement on willingness to establish a start-up comes from the out of work. This, however, might be entrepreneurship based on need, not on opportunity.

Unsurprisingly, those who are already self-employed report the second highest preparedness to undertake a new venture, followed by employed persons (very little difference), while the student population reports the lowest level of preparedness.

It is important to note that we have only analysed the statements of intention, which are not necessary directly linked to outcomes. It would be interesting to see after some time, how many of YIs have established a venture



# 6 YI participants speak about their Training Scheme experience

Quite a few of the participants mentioned that they liked the positive atmosphere, that enabled the exchange of ideas and allowed them to learn in the group of like-minded people. Also, it was frequently mentioned that the participants valued the experiences of more seasoned entrepreneurs. Participants also mentioned practical rather than theoretical approach and the fact that the program made them rethink their ideas.

Their comments are best summarised by these answers to the question what they liked best. Many of those focussed on implementing the programme **online**, which was quite new experience in spring of 2020. "I liked the organization of the workshop even though it was online and it could have been cancelled or postponed. The organizers managed to deliver the same results even in the current situation. The information shared was very clear and presented in a very professional way" (out of work male YI, 30, from Germany). The same feeling was reflected in Bulgaria: "Really, what I liked best were the organized lectures, even though in an online format" (employed 23 year old male).

Many praised the **experience** of the mentors and the ability to meet other aspiring entrepreneurs. In Croatia, the "opportunity to pitch to real investors" was emphasized by a male 24 years student. "The "let's try it" moments and practices" (self-employed male YI, 26, from Serbia). Finally, **meeting others in similar circumstances was a great plus**: "Besides the strong support and great administration team and mentors, I guess the participants were great" (male, 33, employed).

The most common remark was based on the fact that the program was held online. Participants also mentioned they wanted more follow-up, and more 1-on-1 time.

Many of the participants have expressed the **wish the programme would last longer** and more personal connections would have been made. This is neatly summarised by the comment from Bulgaria: "It was interesting to participate online but I still prefer in person lectures. It would have been nice if there was more time for individual sessions in which homework to be discussed. We would have loved to receive more personal advice from the lecturers who obviously have a lot of experience" (female, 22, student).

This was similar in Romania: "Longer program. I am sad that the program finished so early. There was a lot of unexplored resources from mentors. I would like to continue to work in a next program as acceleration program. I am keen to continue the collaboration with the organizers. Overall a great experience and I am so happy that I was there with you. Good luck for your next programs!" (male, 34, employed).



German male, 37, out of work said: "An even better estimation of the chance to be successful with the idea/the product/the service one is planning to go into the market with" (such a wish is probably not limited to the YIs in DE+, but a general wish for all start-uppers!).

Slovenian participant elaborated: "I was expecting more lessons on how to develop a sustainable market entry with emphasis on environmental topics since the programme is focused on renewable and efficient use of energy. I think that would be more important, I believe also quite challenging, than just how to design a business model canvas as it is, because that is quite a big issue nowadays - how to arouse interest in people with enough connections and power, about relevant and much attention needed problematics/solutions. Overall, we did get some very useful where to start." (female, student, 26).





# 7 Overall assessment of the Training Scheme

The Training Scheme has proved to be a great success. It has managed to transfer important knowledge to the Young Innovators in the field of energy efficiency, by equipping them with the skills needed from business development to the pitching practice. All this was achieved despite difficult circumstances of the COVID-19 pandemic which has forced the majority of PPs to move the implementation online, in some cases with little experience on how it is done.

#### 7.1 The areas of improved knowledge

YIs report improved knowledge in the fields of idea generation, business development, pitching and sales. They also reported increased knowledge in the fields of MVP, but have some doubts about their fit for market. The area that needs further attention is the area of securing the need resources, development of MVP and also the "I have the good team aspect".

#### 7.2 Willingness to establish its own Company

The YIs are declaring their intentions to establish their own start-ups. In this sense, the Training Scheme has been a success since it contributed to the project specific objective. It has however proved more successful for males than females. This is probably not a reflexion of the training scheme but of wider social context. It would

#### 7.3 The areas that could be further elaborated in the process of Training Scheme

More emphasis in the future could be given to the securing resources part, as well as team development.

#### 7.4 Other lessons learnt and actionable points for future implementation

The Tool could be adapted for online use.



# 8 Annexes

#### 8.1 List of abbreviations used

Abbreviation	Explanation
AF	Application Form
DE+	Danube Energy+
MVP	Minimum viable product
PP	Project Partners
YI	Young Innovator





#### 8.2 YI feedback questionnaire

Your feedback is vital to the Danube Energy+. Taking into account your views and opinions will help us improve the quality of the program in the future.

We would appreciate it if you could spend some time – you will not spend more than 10 minutes – completing this questionnaire by circling the number you think is appropriate and then providing a descriptive response in the boxes at the end of the form. The questionnaire is anonymous and as a result no-one will be able to trace your comments back to you.

Once completed the results of these questionnaires will be analysed and an overview compiled. The overview will also be used to inform discussion at the project level and in the overall project report.

Thank you for your feedback. Basic demographic (mark, fill in)

Gender:	Age:	Occupation:
Male		student
Female		employed
Prefer not to say		self-employed
		Out o work
		unable to
		work

#### 1) What do you think about the **organization of the program?**

	Strongly	Disagree	Neutral	Agree	Strongly
	Disagree				Agree
The program was well organized	1	2	3	4	5
Lecture rooms were adequate	1	2	3	4	5
Administrative support was sufficient	1	2	3	4	5

# 2) What do you think about the mentors' expertise?

	Strongly	Disagree	Neutral	Agree	Strongly
	Disagree				Agree
Gave sufficient information	1	2	3	4	5
Communicated effectively	1	2	3	4	5
Stimulated my interest on the topic	1	2	3	4	5
Created a stimulating learning environment	1	2	3	4	5

# 3) What do you think about the **program TOOL+?**

, , ,	Strongly	Disagree	Neutral	Agree	Strongly
	Disagree				Agree
The program fulfilled my expectations	1	2	3	4	5
The program provided me with new knowledge	1	2	3	4	5
and skills					
I have learned about the idea generation process	1	2	3	4	5
I have learned about business model	1	2	3	4	5
development					
I have developed pitching & sales skills	1	2	3	4	5
I know how to get to MVP (Minimum Viable	1	2	3	4	5
Product)					

# 4) Are you willing to establish **your own company**?

	Strongly	Disagree	Neutral	Agree	Strongly
	Disagree				Agree
I'm willing to start my own startup	1	2	3	4	5
My initial idea is/will be fit for market	1	2	3	4	5
I know how to secure the resources needed	1	2	3	4	5
I have a good team	1	2	3	4	5
I'm able to carry out the project in question	1	2	3	4	5

# 5) Indicate your **estimated attendance** in the program

100%	Over 75%	75% to 50%	50% to 25%	Under 25%
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Please provide any further comments you think would be helpful.

- 6) What did you like best in the program?
- 7) What could have been improved on the program and how?