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# Deliverable 4.7: Four EU-13 countries stories published

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This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 949125.

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## EXECUTIVE SUMMARY

This deliverable encompasses the first four countries' stories about EU-13 stakeholders, part of the digital campaign "Meet the EU-13". The objective of this initiative is to support *Task 1.4 Widening. Recommendations for mobilisation of National Public Research resources in EU-13* and help promote the research resources of EU-13 countries.

Moreover, the goal of SUPEERA through this campaign is to support EU-13 stakeholders to further network and engage with the EERA community, the SET-Plan, and the Clean Energy Transition, by providing a platform for EU-13 actors and increasing the visibility of EU-13 relevant institutes and research centres.

The four organisations involved in the first phase of the development of "Meet the EU-13" were:

- Research Centre for Sustainable Energy - FOSS (Cyprus)
- Tallin University of Technology - TalTech (Estonia)
- Centrum výzkumu Řež - CVŘ (Czech Republic)
- Institute of Power engineering – IEn (Poland).

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# I INTRODUCTION

On January 1st, 2020, the SUPEERA project[1]- ***SUP****port to the coordination of national research and innovation programmes in areas of activities of the* ***E****uropean* ***E****nergy* ***R****esearch* ***A****lliance* – was launched.

The project aims at reaching four high level objectives:

1) Facilitate the coordination of the research community in support to the execution of the SET-Plan towards the Clean Energy Transition;
2) Accelerating innovation and uptake by industry;
3) Provide recommendations on R&I priorities and policy frameworks through the development and analysis of energy and macroeconomic indicators;
4) Support and promote the connection of the SET-Plan and the Clean Energy Transition with all stakeholders.

To achieve this last objective, the SUPEERA project foresees to spread excellence and broaden participation in the SET-Plan across Europe by, among other goals, encouraging a broader engagement of the so-called EU-13 countries. These countries are mainly eastern countries (Poland, Slovakia, Czech Republic, Hungary, Romania and Bulgaria), the Baltic States (Estonia, Latvia, Lithuania), and south and south-eastern countries (Malta, Slovenia, Croatia and Cyprus).

To support the above, SUPEERA launched a digital campaign (Meet the EU-13) encompassing up to 13 stories – 1 for each country – presenting the scientific landscape, major players, networks, infrastructure, expertise, and engagement in the SET-Plan of the selected countries.

Initially, the country stories were envisaged to be aligned with and cross-fertilised by the physical workshops organised in EU-13 countries by including audio-visual material coming from these workshops, such as conference recordings, footages of the R&D facilities, interviews and testimonials from different actors, etc. However, due to the restrictions deriving from the measures addressing the Covid-19 pandemic, the organisation of these workshops was not possible. Therefore, the SUPEERA project decided to give priority to four stories that portray EERA members from Poland (IEn), Cyprus (FOSS), Czech Republic (CVŘ), and Estonia (TalTech) and to coordinate the production of the written content and the audio-visual material via online channels.

## 1.1 Objectives

Currently, the above-mentioned EU-13 countries have a rather low participation in the realisation of the SET-Plan through the execution of its Implementation Plans. The objective of SUPEERA'S digital campaign "Meet the EU-13" is to provide a platform to promote the research resources of EERA and non-EERA stakeholders in EU-13 countries and to increase their visibility.

[1] SUPEERA Website: https://www.supeera.eu

The subject of the stories are relevant infrastructures, research and development initiatives, and projects part of the efforts to achieve the targets of EU Climate and Energy strategies. By showcasing the achievements of these stakeholders, the final purpose is to encourage the involved actors to make the most of their potential and increase their collaboration in EU-wide initiatives as well as their participation in the SET- Plan and the Clean Energy Transition.

## II METHODOLOGY

The SUPEERA project initially identified national research organisations from targeted EU-13 countries with low-level activity in the SET-Plan Implementation Plans at present, but with a potential to be engaged in their execution in the near future. In order to raise awareness on the SET-Plan and the EERA community, a series of workshops (at least 8) in different EU-13 countries were planned. From these workshops, 13 stories dedicated to stakeholders from EU-13 countries and cross-fertilised with the outputs of the meetings were foreseen. The stories would have featured videos showcasing both the SUPEERA workshops and the infrastructures and research initiatives of the selected EU-13 stakeholders.

However, due to the restrictive measures in response to the Covid-19 pandemic, this was not possible. Therefore, the SUPEERA project set out an alternative plan aimed at identifying and developing the first four stories under these circumstances. The new approach entailed liaising with EERA members based on EU-13 countries and to carry out online interviews.

The selected members were:

- Research Centre for Sustainable Energy - FOSS (Cyprus)
- Tallin University of Technology - TalTech (Estonia)
- Centrum výzkumu Řež - CVŘ (Czech Republic)
- Institute of Power engineering – IEn (Poland).

The four organisations were contacted to explore their interest in participating in the digital campaign. Once this was validated, a first online meeting was held to identify the topic to be featured. The topic was decided in agreement between the SUPEERA consortium in charge of this task and the EERA members involved, in close connection with the SET-Plan activities.

The following steps consisted in the exchange of useful documents for the drafting of the written part of the story and the development of relevant interview questions. Finally, the online interviews were carried out with representatives of the EERA members and edited into shorter video capsules highlighting aspects of the work not only of the institution, but also of the country, that go beyond the content is emphasized in the texts.

Figure 1 compiles the steps and schedule structure that was outlined to present the initiative to the institutions and research centres involved.

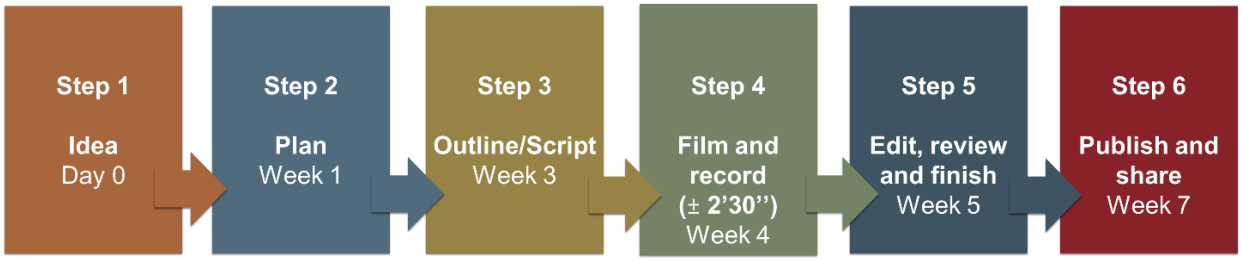


*Figure 1: Planned steps and schedule for the development of the countries' stories*

The final output of this activity are four webpages inside the SUPEERA website, one per country, that include text, images, video interviews, and helpful contact details.

## III DISSEMINATION

All the stories are part of the digital campaign "Meet the EU-13" and are published on a dedicated section within the SUPEERA website, Meet the EU-13 menu item. Each country with its corresponding story has an exclusive webpage.

The first four stories, and the future ones as they become available, will be shared through all EERA communication channels that enjoy higher visibility (website, newsletter, social media). In addition, synergies with the communication channels of SUPEERA's linked third parties and the EU-13 actors that are protagonists of the stories will be sought.

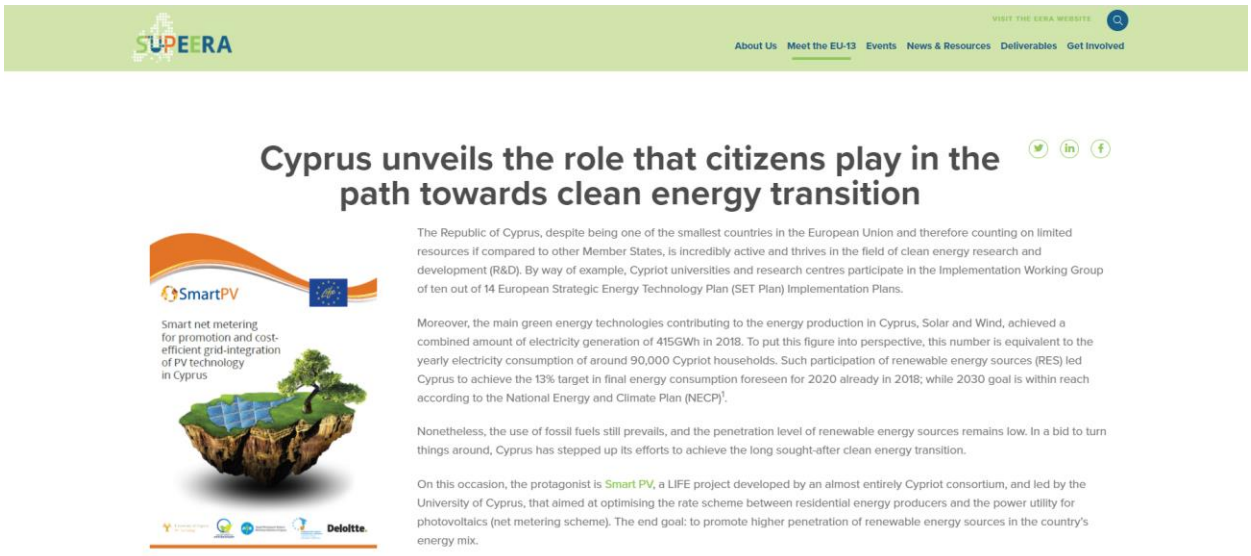


*Figure 2: Example of the country story of Cyprus published on the SUPEERA website.*

The impact of these activities will be measured against the following KPIs and adapted, should the need arise:

| Action | Key Objectives | KPI | Target |
|---|---|---|---|
| Meet the EU-13 Digital Campaing | • Provide a platform for EU-13 actors.<br>• Increase visibility of EU-13 actors. | # website visitors on EU-13 stories | ≥ 7,000 by the end of the CSA |

*Table 1: Summary of dissemination and communication KPIs and Target for the "Meet the EU-13" campaign.*

# IV THE COUNTRIES' STORIES

## 4.1 Cyprus unveils the role that citizens play in the path towards clean energy transition

### Written content

The Republic of Cyprus, despite being one of the smallest countries in the European Union and therefore counting on limited resources if compared to other Member States, is incredibly active and thrives in the field of clean energy research and development (R&D). By way of example, Cypriot universities and research centres participate in the Temporary Working Group of ten out of 14 European Strategic Energy Technology Plan (SET-Plan) Implementation Plans.

Moreover, the main green energy technologies contributing to the energy production in Cyprus, Solar and Wind, achieved a combined amount of electricity generation of 415GWh in 2018. To put this figure into perspective, this number is equivalent to the yearly electricity consumption of around 90,000 Cypriot households. Such participation of renewable energy sources (RES) led Cyprus to achieve the 13% target in final energy consumption foreseen for 2020 already in 2018; while 2030 goal is within reach according to the National Energy and Climate Plan (NECP)[2].

Nonetheless, the use of fossil fuels still prevails, and the penetration level of renewable energy sources remains low. In a bid to turn things around, Cyprus has stepped up its efforts to achieve the long sought-after clean energy transition.

On this occasion, the protagonist is Smart PV[3], a LIFE project developed by an almost entirely Cypriot consortium, and led by the University of Cyprus, that aimed at optimising the rate scheme between residential energy producers and the power utility for photovoltaics (net metering

[2] *Cyprus' Integrated National Energy and Climate Plan*, 2020. https://ec.europa.eu/energy/sites/ener/files/documents/cy_final_necp_main_en.pdf
[3] SMART PV Website: http://www.smartpvproject.eu

scheme). The end goal: to promote higher penetration of renewable energy sources in the country's energy mix.

This project started in July 2013 from the idea of demonstrating the fundamental importance of citizens active participation to achieve relevant levels of energy efficiency. It aimed at developing and validating a cost-optimal2 scheme that gave prominence to the role of prosumers, together with demonstrating the concrete contribution of market-driven incentives.

How was this realised? The Smart PV project developed a pilot demonstration, analysing the practices of a representative sample of the Cypriot residential prosumers (300 people) who were subject to a newly developed net metering system to design an optimum tariff model. This was the first time ever that Time of Use (ToU) tariffs were used as economic incentives for the participants involved. In other words, by predetermining constant higher electricity prices to peak demand periods, the project nudged prosumers to shift electricity use from peak to off-peak hours.

The tariffs were designed through a questionnaire targeted to all the participants, endorsed by both the local Distribution System Operator (EAC) and the Cyprus Energy Regulatory Authority (CERA). Within the context of the program, the participants received at-home tutorials regarding individual energy profiles and had access to a customized website in which they were able to compare their energy patterns with the ones before the roll-out of the pilot. The result? Actively engaged prosumers shifted their energy demand from peak to off-peak periods, reduced their energy consumption, and saw reductions in their bimonthly electricity bills.

Together with its project partners, the FOSS Research Centre for Sustainable Energy of the University of Cyprus showed that it is not necessary to mobilise huge resources to make an impact. In fact, although rolled out in one of the smallest countries of the EU, Smart PV gained national and international recognisance and won the LIFE Citizen's Prize 2019 and the Cypriot Energy Globe Award 2020.

The outcomes of Smart PV are multifaceted. On the one hand, Smart PV stands out as regulatory sandbox experience: the development and validation of a cost-optimum scheme based on Time of Use tariffs designed in tandem by the Distribution System Operator and the regulator through the active participation of the prosumers. Indeed, the instrument developed by the Smart PV team was made available to achieve a general cost-effective rollout of smart metering tools at national level. Moreover, the gained knowledge can be further maximized through the development of net metering schemes and associated policies in other EU countries.

On the other hand, Smart PV raises as a proof of the importance of people's perceptions, attitudes, and behaviours to materialize the benefits of renewable energy sources. This project managed to incorporate and demonstrate the contribution of market-driven incentives that are not only an alternative to costly Feed-in Tariffs (a financial contribution per kWh of energy produced) but that also entail a direct benefit for prosumers which is key to bringing them on board.

Ultimately, Smart PV boosted the penetration of renewable energy sources and paved the way towards a more sustainable electricity grid in Cyprus, actively supporting the national climate targets. But the project also offers us an even more important lesson: that the clean energy

transition goes beyond technology readiness and that in the path towards climate neutrality each and every one of us has a crucial role to play.

### Webpage

Link

## 4.2 Czech Republic's state-of-the-art nuclear infrastructure key for European R&D cooperation in the field of low-carbon energy

### Written content

The Czech Republic became part of the European Union in May 2004 during the Eastern enlargement. Since then, the country has been able to step up its research efforts and renovate its research infrastructure to bring them into line with European standards and better contribute to the ambitious EU research and development (R&D) objectives. Indeed, according to the 2018 report "SET-Plan Delivering Results: The Implementation Plans"[4], Czech Republic is already involved in three Implementation Plans. As per the status of the national low-carbon energy sector, the main renewable sources for electricity generation in Czech Republic are Biomass, Hydropower, Solar PV, and Wind[5]. Nevertheless, nuclear power has been progressively taking a more prominent role: six nuclear reactors generate one-third of the national electricity and the country is committed to expand this capacity in the future years.

From a technical point of view, the research efforts that have led to the progress from one generation of nuclear reactors to another have been guided by the aim of improving, among others, the safety and sustainability of nuclear energy. The main character of this story, the research organisation Centrum výzkumu Řež (CVŘ)[6], has also been a protagonist in the advancement and progress of this energy source through the different reactor's generations.

By becoming a European Member State, a world of opportunities opened for Czech Republic, and CVŘ tapped into the available funding programmes as a launching pad to strengthen the research, development, and innovative potential of the country in the nuclear sector. By so doing, the country became an even more relevant actor in nuclear research activities in Europe. As part of this process, CVŘ, together with the University of West Bohemia, deployed the Sustainable Energy Project (SUStainable ENergy, SUSEN)[7], an initiative funded through the European Regional Development Fund.

Within the SUSEN framework, two modern research sites were built, including a new diagnostic centre in Řež and a new experimental hall in Plzeň. Additionally, five other existing building areas were rebuilt and renovated to accommodate new technologies. Moreover, this multidisciplinary project was divided into four programmes dedicated to key aspects of nuclear

[4] *SET-Plan Delivering Results: The Implementation Plans*, SETIS, 2018.
https://setis.ec.europa.eu/sites/default/files/setis%20reports/setplan_delivering_results_2018.pdf
[5] *National Energy and Climate Plan of the Czech Republic,* 2019.
https://ec.europa.eu/energy/sites/default/files/documents/cs_final_necp_main_en.pdf
[6] CVŘ Website: http://cvrez.cz/en/
[7] SUSEN Website: http://susen2020.cz/en/

technology, such as the development of more sustainable, efficient, cost effective, and safer Generation IV reactors; the evaluation of residual lifetime, reliability, and safety of Generation III reactors; the development of innovative radioactive waste processing (disposal or recycling); and the evaluation of the properties of new advanced materials under extreme conditions.

The infrastructures developed within the SUSEN project were all completed between 2013 and 2015. Nonetheless, the outcomes of the SUSEN project are of far-reaching significance. First of all, the laboratories have been further employed for research purposes in the framework of the follow-up project Research for SUSEN, funded via national programmes. The SUSEN infrastructure has also been made available for researchers from academia, business, industry, and the European Research Area (ERA) countries, reinforcing close working relationships and granting them the possibility to draw upon state-of-the-art instrumental technologies. Likewise, several international projects have been developed within the SUSEN grounds, bringing the country and CVŘ forward in a competitive research environment.

Ultimately, and as if the above were not enough, the Centre is also focusing on non-nuclear application of the SUSEN infrastructures, with the aim of applying the results in the sustainable energy sector. Indeed, researchers are investigating the possible uses of the heat produced by nuclear processes, other than in conventional electric power generation. One possible way to employ this power is in the production of Hydrogen, which can serve as an alternative energy carrier to conventional fossil fuels, a European priority on its path to carbon neutrality.

In essence, this tale portrays CVŘ efforts to establish a roadmap on the ambitioned Czech Republic's research and development landscape in nuclear energy, by ensuring top-class research infrastructures that aim at putting the country at the forefront of the Union's expertise in the field. In addition to the preeminent place SUSEN occupies for having developed newer and safer technological instruments to deploy nuclear in a more sustainable and secure way, the project also represented a major step forward for R&D infrastructure in Central Europe and crystalized the importance of aligning national research priorities with European main concerns.

But over and beyond the above, SUSEN continues to foster collaboration among researchers supporting the exchange of know-how and best practices, contributing to boost a real European research environment, and creating opportunities for synergies that could also be extended to other clean energy technologies, all key factors to increase competitiveness in a globalised environment and to reach the longed-for goal of climate neutrality.

### Webpage

Link

## 4.3 Technological breakthroughs reach industrial scale in Estonia bringing them closer to climate neutrality

### Written content

The Republic of Estonia became a European Union member in May 2004. Since the integration into the common economic bloc, this dynamic Baltic country is characterized by an impressive

economic growth rate, twice as rapid as the EU average, that translates into an increasing need for energy to power their growth. Though it is true that currently most of the Estonian electricity generation stems from the domestic production of oil shale (~70%), the share coming from renewable energy sources (RES) is constantly increasing[8]. Moreover, according to the 2018 report "SET-Plan Delivering Results: The Implementation Plans", Estonia participates in two Implementation Working Groups: solar photovoltaics and concentrated solar power.

The main sources of clean energy in Estonia are biofuels and wind, each of them accounting for approximately 17% and 9% of the electricity generated in 2018. Moreover, in line with the country's thriving environment for research and innovation, Estonia is also exploring other technologies such as solar photovoltaics (Solar PV) whose installed capacity has enlarged fivefold in the last four years. However, the traditional silicon solar cells by which the photovoltaic market is dominated, and that were first introduced back in the 1950s, are still resource intensive, while obstacles related to reflection and absorption losses and efficiency issues remain. The endeavours undertaken by the protagonist of this story in its effort to answer these challenges are at the core of this piece.

Tallinn University of Technology, or simply TalTech[9], a technological university in Estonia and the driving-force behind the country's research in photovoltaics, is currently focusing on the development of the next generation of solar cells. In order to make solar energy widely available, researchers at TalTech are working on low-cost, simply produced, and versatile solar cells, that aim at changing the prospects for photovoltaics in Europe and beyond.

The work is organized into two research groups constituted by three laboratories: on the one hand, the laboratory of thin film chemical technologies; and on the other, the laboratory of photovoltaic materials research and the laboratory of optoelectronic material physics. Even though they focus on the development of different technologies, both pursue the very same goal: to obtain simpler and more cost-effective technologies that enable versatile applications, smoothing the transfer from laboratory scale to industrial scale.

The combination of approaches of a prominent group of researchers from the laboratory of photovoltaic materials research and the laboratory of optoelectronic material physics has resulted in the development of a ground-breaking technology: thin-film solar cells based on a compound semiconductor with very good light-absorbing properties called kesterites. Besides this characteristic, which is crucial for the development of thin layers, kesterites also contain earth-abundant and low-cost chemical elements, key for addressing the materials scarcity issue that surrounds photovoltaic technologies.

Moreover, to produce these semiconductors, TalTech researchers use a unique technology, monograin powder technology, which differs from others used in terms of its method and the fact that it is cost-effective. Monograin powder technology also enables semi-transparent, lightweight,

[8] *Estonia's 2030 National Energy and Climate Plan,* 2019.
https://ec.europa.eu/energy/sites/default/files/documents/ee_final_necp_main_en.pdf
[9] TalTech website: https://www.taltech.ee/en/

and flexible PV modules. Such properties are central for developing integrated applications of photovoltaics into building envelopes (roofs, windows, facades, etc.).

Besides the disruptive technologies that position TalTech at the forefront of innovation in solar PV, efficiency has been the compass steering its activities. This indicator, which is one of the most relevant for the quality of photovoltaics, has also been the cornerstone of its well-oiled research-industry collaboration. In fact, the technologies developed are to be produced at industrial level and commercialised by its spin-off company Crystalsol[10], a joint venture launched in coordination with Austria in 2008. Thanks to this collaboration, Crystalsol will develop an entirely new type of flexible, lightweight, and even semi-transparent photovoltaic film with significant cost and versatility advantages for a range of possible applications, from building integrated photovoltaics to consumer products.

TalTech tireless efforts for bringing its research closer to industry have not stopped there. Its undisputed leadership in the next generation of photovoltaics has earned them a place in several European projects. The most recent, CUSTOM-ART[11], aims at bringing flexible and semi-transparent solar modules from a Technology Readiness Level (TRL) 4-5 (technology validation) to TRL 7-8 (prototype demonstration). In the long run, the project will impact aspects such as conversion efficiency, durability, costs, and sustainable and abundant materials, that are key to ensure the viability and competitiveness of the European Building Integrated and Product Integrated Photovoltaics industries (BIPV & PIPV).

Ultimately, TalTech story is not only one about technological breakthroughs. It is the chronicle of a front runner centre with strong research and innovation capacities, which has been able to understand the national research environment first and the European thereupon, while building its own strengths to address the identified challenges. TalTech has also been able to defy the common belief that most research efforts stay in the laboratory and rarely reach the market by taking a leap and bringing its own close to commercialization.

The highlight of this tale can be summarized in a relevant lesson: Research-industry close collaboration is a critical component of the innovation process and a frequent and iterative interaction among these actors lays at the centre of an effective energy transition if Europe aims to reach its climate goals. In this light, TalTech can be seen as a prime example of innovation and industry uptake of new technologies that will undoubtedly help put the continent on the right track towards carbon neutrality.[12]

## Webpage

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[10] Crystalsol Website: https://www.crystalsol.com/
[11] CUSTOM-ART CORDIS Webpage: https://cordis.europa.eu/project/id/952982
[12] For additional information about energy research activities in Estonia please visit the following website: https://researchinestonia.eu/

## 4.4 Poland strives to become a leading player in the hydrogen sector materializing long-term efforts

### Written content

Poland, a Member State since 2004, is the eight economy within the EU, and according to its National Energy and Climate Plan (NECP), it has the sixth highest volume of primary and gross energy consumption in the Union. The local electricity production deriving from coal mines provides Poland with a certain degree of independence and stability. Nonetheless, in the period between 2010 and 2018 installed Renewable Energy Sources (RES) capacity increased four times and RES electricity production doubled[13], providing an indication of the effort the country is making to set the bases to facilitate the transition towards a more sustainable energy model. In this light, Poland has also joined two SET-Plan Implementation Working Groups, 'Energy efficiency in industry' and 'Nuclear'[14].

This story begins with one of the main trade-offs each society faces as they develop: national economic growth goes hand in hand with additional energy consumption, and Poland is not the exception. However, the most used energy sources are based on fossil fuels that have the dual disadvantage of being both finite and polluting, and therefore not sustainable in the long-term. As a result, governments, the industry, and the scientific community are looking into alternatives based on clean and renewable energy sources.

One of the most promising energy carriers, on top of being environmentally friendly, is Hydrogen. As pure hydrogen does not exist freely in nature; it must be generated either from hydrocarbon-based gases or from natural sources. Although there are three primary techniques used to produce hydrogen from hydrocarbon fuels, none of these processes are qualified as clean. Therefore, the development of clean, or also called green, hydrogen technologies has become key to achieve the sustainably goals set by the EU. As a mark of its commitment, the European Commission has adopted a new dedicated strategy on hydrogen with the aim of exploring its potential to support decarbonisation objectives in a cost-effective way.

One of the technologies currently in use for the generation of clean hydrogen is steam electrolysis, which consists in producing hydrogen from water at high temperatures. In recent years, steam electrolysis based on Solid Oxide Cells (SOC) proved to be an optimal solution, due to high efficiency of conversion and relatively low costs. This is one of the reasons why Solid Oxide Cells operating as electrolysers are being internationally recognised and currently under intensive development. The Institute of Power Engineering (IEn)[15], the protagonist of this success story, and one of the largest institutes in Poland and Central Europe working on energy research, has been actively involved in the advancement of this technology.

More specifically, the Institute of Power Engineering is the holder of a patent portfolio and technology of Solid Oxide Electrochemical Cells that has been under development for 16 years.

[13] *National Energy and Climate Plan for 2021-2030,* 2019*,* https://ec.europa.eu/energy/sites/default/files/documents/pl_final_necp_part_1_3_en.pdf
[14] *SET-Plan Delivering Results: The Implementation Plans*, SETIS, 2018. https://setis.ec.europa.eu/sites/default/files/setis%20reports/setplan_delivering_results_2018.pdf
[15] IEn Website: https://ien.com.pl/home

As a result of its rigorous research, the portfolio has reached performance levels of electricity generation corresponding to state-of-the-art technology, becoming a highly relevant milestone for hydrogen deployment, not only at European level but also worldwide.

On top of the role IEn has played in the development of such technology, it has also been actively involved in promoting the concept of sector coupling in Poland. Indeed, steam electrolysis is the most widely used solution in Power-to-X systems for sector coupling which refers to the process of electrification of end-use sectors like heating and transport, with the aim of increasing the share of renewable energy in these areas, ultimately cutting emissions, and contributing to the sought-after goal of climate neutrality. Over and above that, IEn's efforts have led to the launching of the recently established Centre for Hydrogen Technologies (CTH2), composed by a team of experts coming from a wide range of engineering disciplines, and whose purpose is to support research and development activities on the deployment of fuel cells and electrolysers with the aim of developing a strong tie with the market and the industrial sector.

In the framework of the European effort towards the development of a sustainable energy system, capable of supporting the ever-growing demand, IEn has been able to identify the role it can play by taking a clear stand on its research and innovation priorities. The Institute has not only been at the forefront of the development of the novel green Hydrogen sector, a technology that has become fundamental for the achievement of the net-zero emissions target set by the EU, but it has also tirelessly worked to grow into one of Poland's most outstanding scientific and technological centres. This has positioned them strategically to take an active role in numerous topical EU-funded projects such as BALANCE, HyLAW, NewSOC, ONSITE, SOFCOM, FC DISTRICT, and FC-EUROGRID.

Being able to understand the national research landscape and match it with the European energy and climate priorities lies at the core of the successful approach that the Institute has taken towards the opportunities that the Clean Energy Transition opens for Poland. In IEn's case it meant the development of innovative technologies that will play a key role in paving the way not only of the country but also of Europe towards climate neutrality in 2050. Even though this story started 16 years ago with the decisions IEn made back in the days, never has it been more relevant to say that the best is yet to come for Poland and the pivotal role it is being called out to play in this cause that concerns us all.

### Webpage

Link

## V UPCOMING ACTIONS

According to the plan set out, additional stories, one for each of the remaining EU-13 countries, will be produced, namely eastern countries (Slovakia, Hungary, Romania, and Bulgaria), the Baltic States (Latvia and Lithuania), and south and south-eastern countries (Malta, Slovenia, and Croatia). Given that the travel restrictions have not been lifted at the moment of the submission of this deliverable, the SUPEERA team in charge of the execution of this task foresees that at

least two of the upcoming stories will also need to be organized via online channels. However, as soon as the travelling resumes, the subsequent stories will include audio-visual material recorded on-site as well as incorporate interviews and testimonials from different actors linked to the institution hosting the workshops organized in the corresponding countries.