

Efficient use of energy & resources

Energy Scouts design practical climate protection projects in companies

Young Energy Europe 2021-2024



Young Energy Europe in a nutshell

Young Energy Europe (YEE) provides young professionals with further training in the fields of energy and resource efficiency, mobility and climate protection. The participants qualify as so-called Energy Scouts. Energy Scouts learn to identify and leverage potential energy and resource savings in their companies. As part of YEE, Energy Scouts first complete a theoretical learning phase, which alternates with practical elements.

They then apply the acquired knowledge in teams in their own company and realize measurable successes in the areas of energy efficiency, resource reduction and CO₂ savings on the basis of a practical project. Young Energy Europe enables significant know-how transfer and capacity building in the target countries in the field of operational energy efficiency, paired with customized and ready-to-implement project proposals for each participating company.



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Project partners:

German Chambers of Commerce Abroad (AHKs) in Poland, Czech Republic, Slovakia, Hungary, Croatia, Serbia, Bulgaria and Greece

Coordination:

DIHK Service GmbH, Berlin

Funding:

European Climate Initiative (EUKI) a funding instrument of the Federal Ministry of Economics and Climate Protection (BMWK)

Project duration YEE 2.0: April 2021 - March 2024





Dear reader,

Heating your home with a heat pump, wood or solar energy is more climate-friendly than using fossil fuels. However, the whole thing only becomes truly sustainable if good thermal insulation has been installed beforehand.

This is precisely the idea behind the slogan „Energy Efficiency First“ - the updated EU directive on energy efficiency. The cleanest and cheapest energy is energy that does not have to be generated in the first place. After all, less consumption also means lower costs for the generation of electricity and heat, for grids and for storage. States, citizens and the economy in Europe would therefore do well to operate and produce in an energy-efficient manner before other, more complex and costly solutions are found. After all, energy efficiency not only saves costs, but also CO₂ emissions. Investments often pay off after just a few months.

But how do companies become more energy efficient? How do they reduce energy costs? How do they compare the many different approaches? First and foremost, by people who have a keener eye for energy-related issues. Ideally, by employees who identify energy guzzlers and associated cost drain within the company and are able to suggest more efficient solutions.

This brochure will introduce you to the Young Energy Europe project and the Energy Scout qualification. Between April 2021 and March 2024, nearly 800 young people in eight European countries have qualified as Energy Scouts. They are actively supporting their companies in the search for efficiency potential.

Among other things, they have designed photovoltaic systems for factory roofs, changed the lighting to LEDs and optimized the compressed air systems in their workplaces. Is there an idea for your company? Then I recommend reading the success story of the Energy Scouts and their best practices.

Yours sincerely,

Sofie Geisel
Managing Director DIHK Service GmbH &
Member of the Executive Board DIHK



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Barbara Gralak-Podemska
TIP-TOPOL Sp. z o.o., Poland

"I recommend participating in the YEE program. It is an opportunity to find out what can be improved in your company to reduce costs and CO₂ emissions. I encourage you to get active. It's for the benefit of us all."

Thomas Lappas
ARAG S.E., Greece

"In the Young Energy Europe training, we had the opportunity to learn theoretical AND practical methods required to save energy and reduce CO₂ emissions in a company."



©ARAG Griechenland S.E.



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Ákos Szakács
Penny Market Kft, Hungary

"The Energy Scout training was very useful for us. It was particularly interesting to experience the international network behind it. It was enriching to meet colleagues from abroad and to see what German companies are doing to promote sustainability."

How to become an Energy Scout

Registration

Interested companies register their employees with the respective AHK (German Chamber of Commerce Abroad) for participation in the qualification.

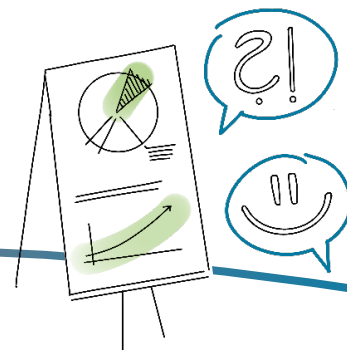
1



2

Workshop

The four to five-day workshop provides a basic understanding of the topic of energy – from generation to efficient use and the associated technologies. In order to facilitate practical implementation, topics such as project management, internal communication and the practical use of measuring devices are addressed as well.





Roman Ferenčík
Robert Bosch spol s r.o., Czech Republic

“The course exceeded my expectations and enabled me to implement my own approaches to reducing energy consumption in our company. The climate protection presentation at the start of the course really motivated us to make a change.”



**Lenka Vrabcová, Kinga Menyhártová
and Daša Magátová**
SLOVNAFT, a.s., Slovakia

“What we like about the YEE training is that it looks at environmental and cost-saving opportunities from different perspectives. Every company and every individual can find the area in which he or she can contribute to the company’s global goals.”

Practical phase

Subsequently, the Energy Scouts design and implement their own energy efficiency project in a team at their company within a period of several weeks.

3



4

Project presentation

In the final module, „Project Presentation“, the practical projects are presented in a joint workshop and evaluated by a jury, with the best being awarded prizes. The participants benefit from experience gained in other companies and receive suggestions for their own search for further potential. Finally, the Energy Scouts receive a certificate of their bilateral chamber of commerce.

As part of YEE 2.0, from April 2021 to March 2024, a total of...

798

Energy Scouts have been qualified

361

Practical projects have been designed



301

Companies have been inspired



The Energy Scouts' practical projects demonstrate how companies can avoid emissions totaling 124,000 tonnes of CO₂ per year.

124,000 t CO₂

This figure corresponds to the annual CO₂ absorption capacity of an average growing forest, consisting of 9.9 million beech trees.

9.9 Million beeches*



*A beech tree binds an average of 12.5 kg of CO₂ per year as it grows (source: Forest Center of the University of Münster)

The Energy Scouts' measures reduce the consumption of electricity and resources.

Overall, the Energy Scouts identified potential electricity savings amounting to

121,000
MWh electricity / year

This corresponds to the average annual electricity consumption of over

42,000
households in Germany*.



By utilizing waste heat, switching to other energy sources or implementing efficiency measures, the following resources, among others, can be saved each year:

558,000 liters
of fuels such as heating
oil, petrol and diesel

as well as **133,000** m³
drinking water



and
41 t
paper

can be saved.

The Energy Scout qualification in Poland

The YEE project in Poland, with its focus on promoting corporate climate protection, inspired participating Energy Scouts and companies alike. The highlights and focal points of the project are diverse and have made a significant contribution to raising awareness among the participating companies.

A key aspect were the practical workshops, which were led by experts and offered participants in-depth insights into topics such as photovoltaics, heating systems and the circular economy. Through exercises, the scouts were able to deepen their knowledge and acquire practical skills to implement sustainable solutions in their companies.



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Energy Scouts at the trainings in Warsaw, 2023

In an innovative and humorous approach, the lecturers put themselves in the role of employees, who were supposed to save resources in the company (e.g. in the area of reducing water consumption). This creative approach enabled the participants to better empathize with the situation and develop realistic solutions.

A fundamental component of the training courses was the exchange between the Energy Scouts. Valuable tips and experiences were shared, which led to mutual networking between the participants.



©AHK Poland

Seminar in Poznan, September 2023

The awards ceremony 2023 at Volkswagen in Wrzesnia was an absolute highlight. It gave the Energy Scouts the opportunity to experience practical energy savings and resource conservation in one of the most modern factories in Poland. This excursion provided valuable insights into the implementation of sustainability concepts at an industrial level and inspired the participants to come up with new ideas and initiatives. We were able to demonstrate the expansion of the photovoltaic park (18.3 MWp) with a concept for utilizing the surplus energy (over 20,000 MWh per year). The concept was designed by Energy Scouts and is already in its implementation phase.



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Markus Baltzer (President of the AHK Poland), Lars Gutheil (Managing Director of AHK Poland), Joanna Wierzbicka-Grajek (AHK Poland) with winners of the Energy Scout Edition 2022 (from the companies TIPTOPOL, A. Berger, T-Mobile, Imperial Tobacco) and Hannah Löchte (DIHK Service GmbH)

Overall, the YEE project in Poland was a big success, with its practice-oriented workshops, interactive exchanges and inspiring excursions enabling the participants to actively contribute to the promotion of sustainable development in their companies as Energy Scouts.



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Energy Scout trainings have also been offered in Poznan in 2023 as part of the qualification program



©Schneider Polska

From left: The Enegy Scouts (2021 edition) Adam Karczarczyk, Ewelina Krajewska and Edyta Grabowska from Schneider Polska Sp. z o.o.



©Multiserwis Sp. z o.o.

Energy Scouts, class of 2021, of Multiserwis Sp. z o.o.

Energy Scout qualification in the Czech Republic

After the first three years, during which we gained a lot of experience, we did not focus only on energy savings when selecting practical projects, but gave more space to resource efficiency. As a result, the projects were very diverse. This was not only appreciated by our expert jury when selecting the best projects, but also encouraged the originality of the ideas. This is also reflected in the themes of each year's winning projects. In 2021, the team from Tomáš Bata Hospital won with a project dealing with the management of food catering waste and hot water saving in showers. In 2022, a participant from PYROTEK CZ, s.r.o. was successful with a project that involved using the heat from an incinerator for cooling. In 2023, a team from Vitesco Technologies Czech Republic s.r.o. impressed the jury with an innovative solution for cleaning internally used packaging materials using ionization. We also taught soft skills in our learning modules during the 2021-2024 project period, like project management and methods, and how change processes can be communicated successfully. In addition, the topics of taxonomy, ESG and hydrogen technology have been added. We also invited successful Energy Scouts from previous years to present their projects to the new participants as examples of best practices in order to inspire them.



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Demand in the Czech Republic for the YEE qualification has exceeded the maximum capacity of 30 participants per course every time in the past three years. In 2021, when the training became an online webinar due to the Covid pandemic, we increased the maximum capacity and received over 60 registrations. Of these participants, 44 Energy Scouts successfully completed the course.

Due to the very good results of YEE in the Czech Republic during the first four years (2018-2021), we were able to gain important partners for the project for 2022 and 2023 (main partner 2022 Bosch, main partner 2023 Škoda Auto a.s.).



©AHK Tschechien

Following YEE 2.0, we were able to win a two-year grant to finance a follow-up project through the National Environmental Program as part of the National Economic Stimulus Plan. The highlights of the course also included visits of various kinds.



©AHK Czech Republic

We had the opportunity to visit several interesting places in 2021-2023, e.g. the research center of the Technical University of Prague UCEEB Buštěhrad, the modern buildings of the National Technical Library, the heating plant of the company Ško-Energo, s.r.o., the Podolí waterworks in Prague and the low-energy building Otevřená zahrada in Brno.

The project by Tomáš Ihnát and Oto Brabec (employees of Ško-Energo) to save service water in the Ško-Energo heating plant was already implemented in the company during the course. As a result, Ško-Energo also recorded an interview with our graduates as part of the „Pod komínem“ („Under the Chimney“) series.



©AHK Czech Republic

**Alena Hybnerová, Veronika Hrnčířová,
Sára Crhová and Marek Lackovič**
Energy Scouts, ŠKODA AUTO a.s.

“Each of us works in a different position in the company and therefore views the topic from

different perspectives. The trainings helped us to understand each other better.”



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Pavel Zámyslický

Deputy Head of Climate Protection Section and Director of Energy and Climate Protection Department of the Ministry of the Environment of the Czech Republic

“Thanks to the program, around 30 new experts are trained every year, who put their knowledge directly into practice, e.g. in the field of energy saving. The subsequent implementation of the proposed energy-saving measures not only benefits the participants, but also the companies directly.”

Ondřej Beneš

Veolia Holding Česká republika, a.s. Lektor

“The concept of the course, the way in which it is conducted and the active involvement of lecturers and participants guarantee that the topic of energy saving and the implementation of innovations in industry and administration is actively addressed.”



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René Harun

Managing Director AHK Services s.r.o.

“The Young Energy Europe project was already very popular in the initial phase. The fact that even more companies took part in the continuation of the project in 2021-2023 also exceeded our expectations. The course was successfully completed by 97 participants from 42 companies. 43 energy-saving projects were developed, through which the Energy Scouts proposed 57 energy-saving measures. The topics ranged from savings in the areas of compressed air systems, lighting, heat recovery and the use of photovoltaics to the optimization of resource use, recycling and water savings. Many projects were implemented in the short term, as companies can simply reduce their energy costs and make a contribution to climate protection.”

The Energy Scout qualification in Slovakia

In Slovakia, we implemented YEE as a five-day training course on-site as well as additional miniworkshops in online form. The five-day training course was divided into three content modules.



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In 2021 and 2022, there was one training course in Bratislava each year. In 2023, there were two training courses, one in Bratislava and one in Košice. The prospective Energy Scouts gained an insight into both theory and practice at different locations in Bratislava and Košice that were suitable for the climate protection topic. The focus topics reflected the topics in the companies. Practical skills such as presentation techniques and the use of measuring devices were also taught.



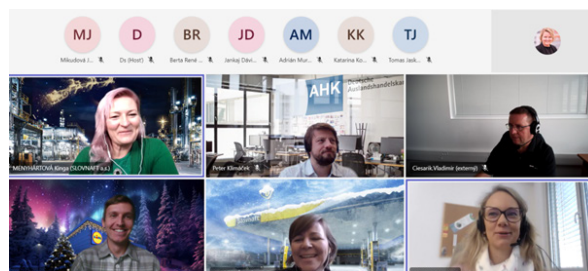
©AHK Slovakia / Barbora Cholková

The presentation of the measuring devices and the opportunity to carry out simple measurements at Viessmann during an excursion were very interesting. The measuring devices were then made available to the Energy Scouts for use in their own company. Viessmann received an award for its energy-efficient building. The company regularly implements new measures to increase energy efficiency.

The feedback from the companies was positive. The Energy Scouts were very satisfied with their participation in the project and the training. It was emphasized several times that expectations were exceeded.

For the Energy Scouts, the international exchange and the national exchange between the different years was extremely inspiring - both were highly appreciated, digitally and in person.

The media also became aware of our project. Amongst others, we were given the opportunity to present the project in German on Slovakian Radio in the program „Slovak Radio International“. This program is very popular among many German managers in Slovakia.



©AHK Slovakia

A highlight of the training courses was the presentation of certificates at the end, which took place in a festive setting. Every year, all Energy Scouts were invited to the residence of the German Embassy in Bratislava. The active participation of Ambassador Barbara Wolf was not only a sign of her great interest in Young Energy Europe, but also an expression of her personal appreciation for the Energy Scouts.



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Katarína Pauerová**YEE Project Manager, AHK Slovakia**

“Our project team and AHK Slovakia are proud to be an important part of the international YEE project. The three years of intensive exchange of experience at international level with the DIHK and other AHKs spurred us on and inspired us to come up with new ideas for the future.”



©AHK Slovakia / Barbora Cholková

Katarína Miklovičová, Michal Ďuricha, Roberta Jamborová
Energy Scouts, VACUUMSCHMELZE, s.r.o.

“Our team really enjoyed the training. From the organization to the premises to the professional and interactive approach of the speakers. We gained new insights into important topics [...] and had the opportunity to try out and borrow various measuring devices that can help us with energy optimization.”



©AHK Slovakia / Barbora Cholková

Daniel Cvacho, Vladimír Ciesarič**Energy Scouts, Scheidt & Bachmann Slovensko s.r.o.**

“We are very grateful for the opportunity to participate in the YEE 2023 training and appreciate it very much. The workshop not only gave us a comprehensive insight into energy and material saving options, but has also shown possible applications for professional and private lives. The inspiring and interesting premises in which the training courses were held were a nice bonus. We also used the knowledge we gained to implement a photovoltaic project for our production hall in Bytča which will make our company even more environmentally friendly. Almost all of the participants became proud Energy Scouts and saw themselves as pioneers within the company, raising awareness of the issue of energy consumption and its impact on the global environment, climate and the environment.”



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Energy Scout qualification in Hungary

The focus of the Energy Scout training course is project work and its positive impact on climate protection and companies' energy costs. As part of the training, our participants designed complex projects with the help of the lecturers, most of which were subsequently implemented. In addition, our participants praised the exchange of experiences as particularly valuable and the networking as very enriching.

Highlights of the project were the national and international awards ceremony. This was the best illustration of what participants can achieve, how much the practical training, the continuous help of knowledgeable experts (lecturers) and the exchange of experiences mean. At the international award ceremony, this event was crowned by networking between the eight countries, which was a lasting experience for the participants and organizers.



©VEE / Schicke

For some of the participating companies, the training had a particularly big impact. They not only implemented project ideas and reduced their energy consumption in real terms, but also built up entire energy teams with the help of their newly acquired know-how. They have successfully shaped the mindset of their employees and have since developed many new projects.

The mentoring workshops with other AHKs have also been very valuable for us as organizers. We are appreciative to be able to share our experiences regarding acquisition and implementation with other participating AHK partners.



©DUHK



Mária Boros-Huber

Managing Director of the German-Hungarian Knowledge Center of the AHK Hungary

“We were a proud project partner in the Young Energy Europe project and have not only been able to expand our range of training courses on energy efficiency and climate protection, but have also been able to strengthen both the specialist knowledge and the sustainability mindset of many of the participating companies. The graduates are happy to share their approaches about realized projects at our Best Practices events.”



©DUHK

Dr. Zoltán Magyar

Leading lecturer and member of the jury

“A major advantage of the training course is that the teaching material was developed by German practitioners. This gives the participants an insight into the local conditions, technologies and proven solutions. In addition, the Hungarian situation is also presented. Another special feature of the course is that the participants come from very different companies and can discuss their experiences on site with each other and the lecturers.”

István László

Energy Scout, Fővárosi Vízművek Zrt

"I really liked the networking aspect, where not only the lecturers, but each participant commented on the work of the others. If there was an interesting question, we were able to discuss it and learn a lot from each other. We were able to come up with new ideas and think together. The training really helped us to adopt a new way of looking at things and develop ideas."



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Evelin Németh and István László from the Budapest waterworks



© Continental Automotive Hungary Kft.

Márton Decsi, János Imre, Gergő Demkó from Continental Automotive Hungary Kft

János Imre

Energy Scout, Continental Automotive Hungary Kft.

"During the training, we received a lot of useful information on the various specialist topics from experienced experts. The opportunity to participate online was very practical."



© Denso Kft.

Olivér Pál

Energy Scout, DENSO Kft.

"The comprehensive presentations on various energy topics helped me a lot in my daily work and gave me ideas for a next improvement project. The lecturers kept my attention throughout with their presentation style and professionalism. The projects presented at the final event reflected the effectiveness of the training."



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Levente Hegyi and János Szikszai, (center) here with project manager Krisztina Kottmayer (3rd from left) at the international award ceremony 2023 in Berlin.

Levente Hegyi and János Szikszai

Energy Scouts, BAUMIT Kft.

"Energy Scouts trainings are a great educational opportunity for the younger generation."

Energy Scout qualification in Croatia

In 2021, the Energy Scout trainings were held exclusively in the capital Zagreb. From 2022, the training courses were successfully held in Slavonia in the east of the country and in the Međimurje region in the north. Both in the regions and in the capital, the training courses focused in particular on the topics of energy management in companies and optimization and savings opportunities with practical application. Almost 100 Energy Scouts successfully completed the training in Croatia with a specially developed practical project. After the most popular project category of lighting, the Energy Scouts predominantly chose photovoltaics as the topic of their practical project, not least due to the high level of sunshine in Croatia.



©HF Belišće

In all the years of the project, our personal highlight was that customized energy-saving approaches, especially from the 2022 cohort, found their way directly into implementation: 97% of the projects designed by the Energy Scouts in 2022 were already implemented in 2023!

We are also the only YEE location to date that can count on its own Energy Scouts. Our YEE project manager and project employee also completed the training courses in 2022 and developed a practical project for the AHK.

This not only provided us with a more efficient and energy-saving solution in our office, but also deepened our understanding of the training content and any needs that may arise for upcoming Energy Scouts.



©YEE / Enters

Head of Project Max Junghanns (left) together with YEE project ambassador Stefanie Ziska at the international award ceremony 2023 in Berlin.

Stefanie Ziska

Managing Director AHK Croatia and ambassador of Young Energy Europe

“In recent years, we have noticed that awareness of energy efficiency and climate protection is growing in Croatia. Many of our member companies confirm this through the increased use of renewable energy sources, particularly in the area of solar and heat pumps. The Energy Scout training came at just the right time for many companies to uncover potential energy and resource savings and thus reduce costs.”

Ines Basnec und Božidar Voćanec**Energy Scouts, HAIX Group**

“We recommend the Energy Scout training primarily because of the acquisition of new knowledge on the subject of energy saving in companies. After the training, we were able to take on responsibility very easily and further develop our vision of energy saving in the company, thus making our contribution to climate protection.”



©HAIX



©AHK Kroatien

Daniela Buntak**YEE Project Manager, AHK Croatia**

“Young Energy Europe supports us all in doing our bit to improve climate protection measures, raise environmental awareness and promote the exchange of knowledge and experience. It not only enables the Energy Scouts to expand their knowledge in the areas of climate and environmental protection, but also helps us as project coordinators, identify “energy guzzlers” in the office and at home and optimize them with sustainable solutions.”

Josip Ugarković**Energy Scout, Steam-tech j.d.o.o.**

“It was a great pleasure to be part of the Young Energy Europe project. I am incredibly grateful for the opportunity to have presented my project to the international Energy Scouts community.”



©YEE / Enters

Energy Scout qualification in Serbia

The great interest of Serbian companies in the Energy Scout qualification was already reflected in the online national kick-off with around 112 participants. The first generation of Energy Scouts (training in 2021) had the opportunity to gain valuable knowledge on the topics of climate protection, energy efficiency, technical measures for energy savings and resource efficiency. The training courses were conducted by four lecturers from well-known Serbian companies. In 2022, we introduced a new module to the curriculum – e-mobility – which was led by a new lecturer. Experience from previous years has shown us that most of the Energy Scouts who took part in the training courses came from industrialized regions of Serbia. Accordingly, we have decided to hold the training courses outside Belgrade in 2023. We have therefore chosen two major cities where industry is strongly represented. The Mind Park industrial park in Kragujevac and the Science and Technology Park in Niš were chosen to host our training courses.



©AHK Serbia

Tour of the Mind Park by the Energy Scouts in Kragujevac

In 2022, the training on e-mobility took place at the Porsche SCG d.o.o. site, where the scouts were able to experience test drives with e-cars, among other things, which was a major highlight for them.



©AHK Serbia

Serbian Energy Scouts at the “hybrid” 2022 award ceremony



©YEE / Schricke

Adriana Petrović

Energy Scout, ZF Serbia d.o.o.

“Educational, instructive, innovative and entertaining. That’s how I would describe the Young Energy Europe project. The training of several Energy Scouts within the company has primarily helped to build a team within our organization. Thanks to the information and technical guidance we received during this training, we were able to achieve significant savings by implementing simple and effective measures.”

Nada Stamatović**Energy Scout, Nelt Co. d.o.o**

"I am so proud to be part of the Nelt Group team that participated in the Young Energy Europe program! After we won first place at the event in Serbia, my colleagues Mira Komlenić-Matejić, Ivan Milićević and I were given the opportunity to present our project and our company at a special event in Berlin the following year. Thanks to the German-Serbian Chamber of Commerce (AHK Serbia) for the organization and to all the participants who presented their projects at the closing event. It was a great pleasure to meet you and talk about sustainability issues such as energy efficiency and decarbonization.

Many thanks to the European Climate Initiative (EUKI) and the Federal Ministry for Economic Affairs and Climate Protection for their support of the program."



©YEE / Enters

Nada Stamatović pictured here together with Energy Scout & team member Ivan Milićević from Nelt Co. d.o.o.



©AHK Serbia

Nikola Čatović**Lecturer**

"I am grateful for the opportunity to support our young "energetic" scouts in Serbia. I am sure that their enthusiasm and commitment will contribute to shaping a sustainable future for all of us. Thank you for making us part of this inspiring journey."



©AHK Serbia

Stanislava Milošević**Energy Scout, ProCredit Bank Serbia**

"Many thanks for the inspiring presentations and experiences, for the exchange and for the lively discussions among the participants"

Energy Scout qualification in Bulgaria

As an “experienced AHK”, the task was to implement the continuation concept developed towards the end of the project term. This was no easy task, given the frequent parliamentary elections in our country, the ongoing consequences of the coronavirus pandemic and the start of the war in Ukraine. Despite all the challenges, we succeeded in implementing YEE 2.0 and always find new participants and partners, which we are very proud of. We have worked on various concepts for self-financing and

developed a so-called mentoring program. In the mentoring program, not only companies send their employees to the YEE qualification, but also students from vocational high schools with which a partnership already exists or is being entered into. The implementation of the projects takes place primarily in the participating companies. At the same time, this creates initial contacts between young people and the companies, which can counteract the prevailing shortage of skilled workers to a certain extent.

The new topic - biodiversity - was very well received and will therefore continue to be part of the teaching modules we offer in the future. We will increasingly try to focus more on the overarching topic of combating climate change. One example of this is the Climate fresh game, which consists of 42 cards, each representing an aspect of climate change. The Energy Scouts will be guided through a fun process that will help them discover the link between the causes and consequences of climate change, explain all the geophysical and social changes that are taking place and ultimately encourage them to look for possible solutions to combat the crisis in their businesses.

Another success for us was that YEE received the “ESG Award 2023” (ESG = Environmental, Social and Governance) from PWC Bulgaria in the “Education Program” category. An exchange also took place in Bulgaria between the Energy Scouts at national level.



©PWC Bulgaria

The event was held on a competitive level to celebrate the 5th anniversary of Young Energy Europe in Bulgaria. The nominations were divided into four categories: interactive project, most active company, best mentor, best team. All nominees received certificates. The certificates for 1st, 2nd and 3rd place, were selected from the best of the best of all year groups for the entire duration of the project.

Other highlights included the 200th Bulgarian Energy Scout, whom we welcomed to the training courses, and our active participation in the “International Energy Scout Award 2022” in Berlin.



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Muhammed Ashim, the 200th Bulgarian Energy Scout



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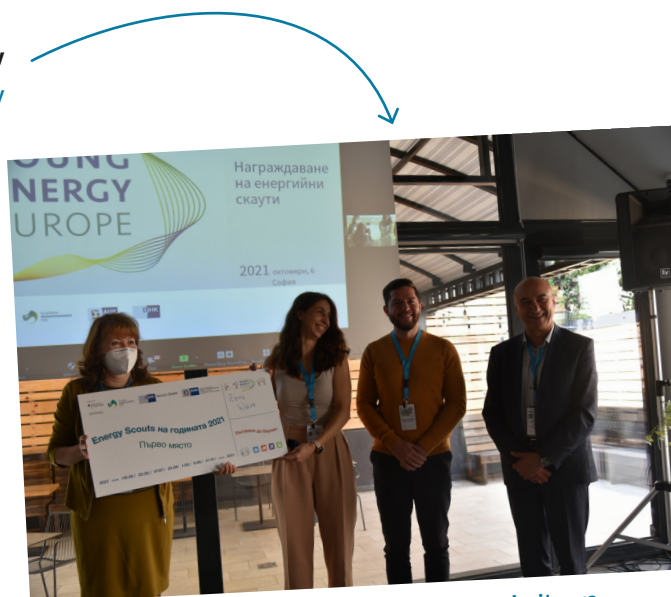
The Energy Scouts Soner Solakov, Kalin Tschervenkov, Galin Georgiev from the VSCPI Burgas vocational high school (from left to right) at the international award ceremony in Berlin, June 2023

Denimir Dimitrov

Energy Scout, Zero Wave company

in an interview for the BNT 2 channel, Program “Inovativno”

“The YEE training provided us with detailed information about the environmental footprint of our production and what happens to the product from the beginning to the end of the production process.”



©AHK Bulgaria

Denimir Dimitrov (2nd from right) and Blajka Dimitrova (2nd from left) from the ZERO WAVE, together with Dr. Mitko Vassilev, Managing Director of ZERO WAVE. AHK Bulgaria and Prof. Rumyana Zaharieva, Lecturer

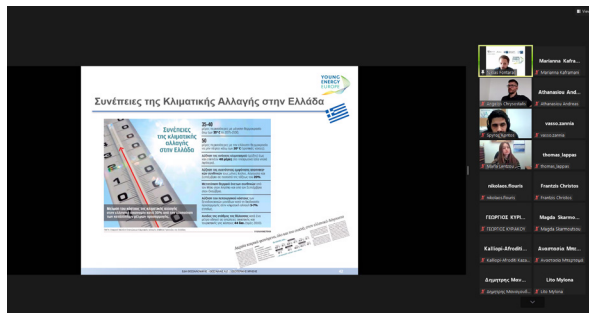


©YEE / Schicke

Teodora Lapschova, Energy Scout of BNT 2 (Edition 2021), here in 2022 at the international award ceremony in Berlin. As an Energy Scout and journalist, she has published four TV reports about YEE in the program “Inovativno” in Bulgaria.

The Energy Scout qualification in Greece

In Greece, we used a digital training format in which our lecturers passed on useful knowledge on energy and resource efficiency to the prospective Energy Scouts and enabled them to develop their own practical project. The great advantage in this case was that we were not tied to a specific location, which meant that specialists from different regions of the country and from the more than 3,000 Greek islands were able to take part in the training.



In 2022 and 2023, prospective Energy Scouts were able to take part in the YEE training courses in interactive webinars

Some “alumni”, who had been trained as Energy Scouts in previous years, were occasionally involved in the acquisition and training processes by presenting their projects. Some of them also took part in the award ceremony and were able to find out which practical projects the following Energy Scouts had designed.

Due to the rapid rise in electricity prices, we focused the training on the topic of energy saving. In addition to theoretical content on renewable energy systems, energy saving and rational use, the Energy Scouts learned in detail how to calculate energy savings and evaluate the sustainability of energy-saving investments for their companies. Most of the practical projects involved measures in the areas of lighting and photovoltaics.

Our personal highlight was the international award ceremony in Berlin in June 2023. Our two Energy Scouts Mr. Athanasios Mouzas from TÜV Hellas - TÜV Nord, who won first place in the Greek award for the best with his practical project on photovoltaics and awareness raising, and the runner-up Ms. Stamatina Daningeli from Dragées Hatziyiannakis S.A. attended the event accompanied by AHK project manager Marianna Kafra mani.

Overall, we reported a lot about the YEE 2.0 project on various communication channels over the course of the project. This enabled us, together with the AHK partners in Thessaloniki, Crete and the greater Athens area (surrounding region), to draw the attention of companies in Greece to the topics of climate protection, resource efficiency and energy efficiency.

The Energy Scouts of 2021 were impressively motivated. Their projects were so worthy of replication that we decided to publish a brochure in which the concepts of all the teams and the energy and resource savings achieved in the respective companies were presented in detail. The interest in the brochure and the response on the topics was very high.

Nikolas Kokkosis
Jury member

“The Energy Scouts’ practical projects have been extremely constructive for the Greek economy and for spreading the philosophy of energy saving. Their commitment to promoting environmentally conscious practices inspires everyone involved to reduce their carbon footprint. I am proud to have contributed to the promotion of sustainable practices and environmental awareness as a jury member of the YEE competition.”



The three members of the jury for the Greek award ceremony of 2023: Nikolas Kokkosis, Christos Nikoloudis, Georgios Ageridis and Katerina Panagiotou, Project Manager of the Education and Training Department of the AHK Athens

Prof. Dr. Ing. Athanassios Kelemis**Managing Member of the Board AHK Greece**

“Through the YEE project, which we have been implementing for six years, we have made a substantial contribution to the energy efficiency of many companies in Greece. It is of great importance that appropriate initiatives and opportunities exist to gain knowledge about the practical approaches to operational climate protection measures that affect both society and the national economy.”



©AHK Greece



© Farma Chem

Athanasios Mouzas**Energy Scout, TÜV Hellas - TÜV Nord**

“It was a unique experience to be part of the international award ceremony. The ideas we heard from the various European Energy Scouts and the opportunity to discuss and exchange experiences with them gave us more motivation for energy-related project work in our companies - something that Greece needs.”



©YEE / Enters

Lito Mylona & Anastasia Bertsima**Energy Scouts, Farma Chem**

“During the seminar, theoretical concepts related to climate change and sustainable development were analyzed and practical exercises were carried out to accurately measure savings using the relevant tools.”



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Stamatina Daningeli**Energy Scout, Dragées Hatziyiannakis S.A.**

“Through my participation in the YEE training courses, I have gained important knowledge about energy efficiency and environmental awareness on a personal level, both through the training days and through the International Energy Scouts Exchange Meeting and, above all, the award in Berlin.”

Industry: Logistics

Energy source: electrical energy & natural gas

Lighting savings potential: 114.84 MWh/a

CO₂ savings potential: 93.9 tons of CO₂/a (electricity only)

Insulation savings potential: 28.57 MWh/a & 96.6 MWh/a natural gas

CO₂ savings potential: 5.7 tons CO₂/a & 19.5 tons CO₂/a

Investment costs: € 90,207

Amortization period: 2.7 years for lighting,
approx. 1.5 years for insulation

Company:

No Limit Sp. z o.o.

www.nolimit.pl



Heat insulation



Lighting

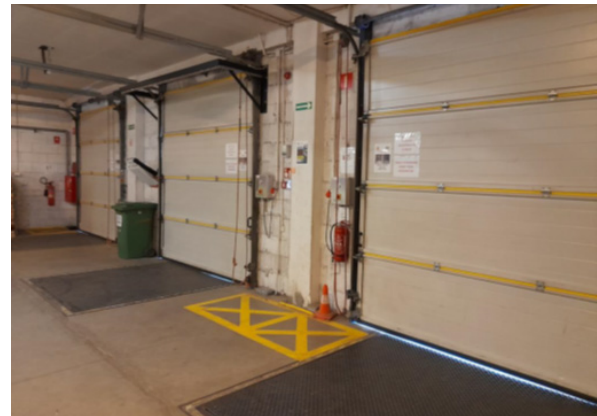
Energy Scouts modernize lighting in warehouses and install PVC curtains

No Limit Sp. z o.o. is a Polish logistics company with 20 warehouse and distribution centers in Central and Eastern Europe. The three-person Energy Scout team, consisting of Dominika Groblewska, Aneta Stegińska and Paweł Tomczak, focused on modernizing the lighting and reducing heat loss by installing PVC curtains in the warehouses. By replacing 450 old lights with energy-efficient LED lights and installing motion detectors in less frequented areas, they were able to achieve annual savings of 115 MWh of electricity and 94 tons of CO₂.

In addition, PVC curtains on the warehouse doors now reduce heat loss and thus reduce consumption by 125 MWh of natural gas for heating per year.



The roller shutters in the larger warehouse are open for an average of five hours a day. PVC curtains now close the gaps, saving natural gas for heating.



The roller shutters are designed for delivery vans and are open for an average of three hours a day.

Their practice-oriented project convinced the Polish jury and secured them third prize because it was well documented and already in the implementation phase.

Industry: Hospital

Energy source: District heating Energy

savings potential: 368 GJ/a heat

savings potential: 3,066 m³ water

CO₂ savings potential: 202 t CO₂e/a (Composting)

37 t CO₂/a

Potential cost reduction: 18,454 €/a (Composting)

15,895 €/a (hot water)

Investment costs: 31,373 € (Composting) 8,157 € (hot water)

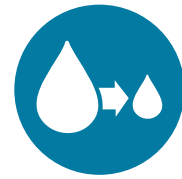
Amortization period: 21 months Composting

6 months hot water savings

Company:

Krajská nemocnice Tomáš Bati, a. s.

www.kntb.cz



Water consumption



Recycling

Energy Scouts save hot water and develop methane reduction concept at Tomáš Baťa Regional Hospital in Zlín

The Tomáš Baťa Regional Hospital in Zlín (CZ) has more than 2,230 employees and provides around 925 beds for patients. Energy Scouts Libor Kročil and Zdeněk Surovák identified two key measures: composting food waste on the one hand and installing energy-saving shower heads on the other. The disposal processes were optimized by installing a composting plant for waste from the catering sector. Highly climate-impacting methane emissions were reduced by 202 tons of CO₂ equivalent. The conversion of 250 shower heads also led to considerable savings of over 3,000 m³ of water and

368 GJ of heat per year. Saving hot water is worth it, as this small investment of just € 8,157 pays off after just six months.



The winners: Energy Scouts Libor Kročil and Zdeněk Surovák from the Tomáš Baťa Hospital in Zlín.



The Energy Scouts tested various watersaving shower heads in the hospital's showers.



Bat'a Hospital: Food catering waste have been currently collected in barrels and transported away regularly.

The expert jury recognized the Scouts as the best Energy Scouts of 2021 in the Czech Republic and praised their projects that could be implemented in the short term.

Sector: Food retail

Energy source: Electrical energy

Electricity savings potential: 6,240 MWh/a

CO₂ savings potential: 1,167 t CO₂/a

Potential cost reduction: 1.18 million €/a

Investment costs: 100,000 €

Amortization period: 1 month



Lighting



Cooling

Company:

Lidl Slovenská republika, v.o.s.

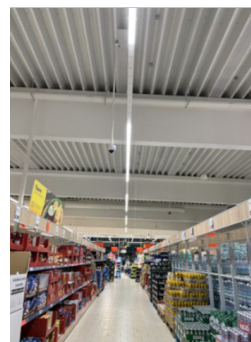
www.lidl.sk

Energy Scouts significantly reduce lighting costs at Lidl Slovakia

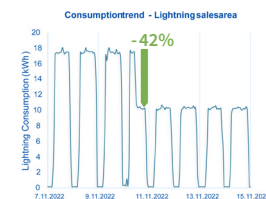
Lidl Slovenská republika v.o.s. is a large chain of supermarkets in Slovakia with 164 stores. In their practical project, the Energy Scouts Jana Vozárová and Martin Brezina from Lidl focused on reducing lighting costs in the stores. By smartly optimizing centrally controlled lighting parameters and reducing lighting intensity, they were able to significantly reduce electricity consumption in all stores.

For example, the lights now only go into typical daytime mode five minutes before the store opens instead of 15 minutes. In addition, the range of offered chilled beverages in the winter season was minimized

and thus reduced the costs for cooling. In total, 5,811.56 MWh of electricity was saved over a period of eleven months, which corresponds to 6,240 MWh per year, while at the same time reducing CO₂ emissions by 1,167 tons per year.



© Lidl Slovakia



© Lidl Slovakia

Reducing the light intensity by 33% in 164 Lidl stores was a decisive step.

Electricity consumption was monitored and fell sharply after the project was implemented.



©AHK Slovakia Barbora Barikova

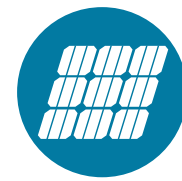
Energy Scouts Martin Brezina and Jana Vozárová began with sensible and realistic planning, but became bold when it came to implementing the practical project. Their decision to switch off a third of the lighting in 164 shops resulted in a saving of 6,240 MWh and 1,167 tons of CO₂ per year.

The project realizes considerable energy cost savings, thanks to the multiplication at 164 locations in Slovakia.

Sector: Waterworks Energy
source: Electrical energy (photovoltaics instead of grid electricity)
Energy savings potential: 1,980 MWh/a
CO₂ savings potential: 416 t CO₂/a
Amortization period: 4.5 years



Pumps



Photovoltaics



Energy management

Company:
 Fővárosi Vízművek Zrt.
 www.vizmuvek.hu

Energy Scouts from Budapest's waterworks use water storage tank as a battery for photovoltaic system

The Budapest Waterworks (Budapesti Vízművek Zrt.), a municipal company, supplies around 2 million people with clean drinking water. Evelin Németh and István László, Energy Scouts and engineers at the company, monitor the daily operation and balanced interaction of water reservoirs, pumps and consumers demand.

This has led to a reduction in the annual electricity consumption by 1,980 MWh and a CO₂ emissions reduction of 415.8 tons. The amortization time is only 4.5 years.



©Fővárosi Vízművek Zrt.

István László and Evelin Németh checking the data on the PLC screen in the engine house

The main aim is to cover the entire water demand at any given time at the lowest possible energy costs. As part of their practical project, the Energy Scouts suggested using unused “elevated” drinking water reservoirs as energy storage and installing a suitable photovoltaic system. During the day, drinking water is now treated using sustainable energy and pumped into the reservoir. There it is available for peak loads and acts as an energy store.



©Fővárosi Vízművek Zrt.

One of four solar parks at the waterworks premises, which will be expanded in the future.



©Fővárosi Vízművek Zrt.

Evelin Németh and István László inspecting operations in the engine house

István László and Evelin Németh were named Hungarian Energy Scouts of the Year 2021.

Industry: Metal processing in the automotive industry

Energy source: Electricity

Energy savings: 740 MWh/a

CO₂ savings potential: 107 t CO₂/a

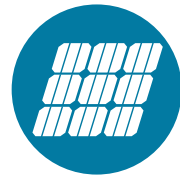
Cost savings potential: 167,494 €

Investment costs: 534,810 € (EU funding: 289,010 €)

Amortization period: 1.46 years



Lighting



Photovoltaics

Company:

Multinorm d.o.o.

www.multinorm.hr

Croatian Energy Scout cuts electricity costs by more than 60% by switching to LEDs and a PV system

The Croatian company Multinorm d.o.o. in Cerna builds devices and tools for the automotive industry. It employs over 380 people and supplies customers such as BMW and Audi. Energy Scout Dario Lovretić focused on lighting and a photovoltaic system in his practical project.



©Multinorm d.o.o.

Energy Scout Dario Lovretić works with the technicians to install LED lighting.

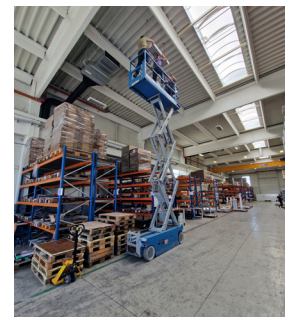
By replacing 163 industrial lamps with LED technology, he reduced electricity consumption for lighting by 60% and cut lighting costs by 32,460 € per year, resulting in a CO₂ reduction of 20.8 tons per year alone. The employees also benefited from the warm light color and a high light intensity.



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Final measurements on the roof and installation of the first solar modules

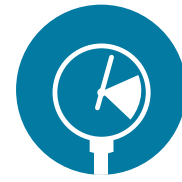
In the next step, Lovretić planned to install a large 500 kWp photovoltaic system on the roof in order to cover around 64% of the company's electricity demand and reduce its dependency on the local electricity supplier. Thanks to subsidies from EU funds for structurally weak regions, the projects have an extremely attractive payback period of 1.46 years.



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Dario Lovretić received the second price from the Croatian Young Energy Europe Jury in 2022 for his innovative project.

Industry: Automotive supplier
Energy source: Electrical energy
Energy savings potential: 420 MWh/a
CO₂ savings potential: 441 t CO₂/a
Potential cost reduction: 29,400 €/a
Investment costs: 2,500 €
Amortization period: 0.1 years



Compressed air systems

Company:

ZF Serbia d.o.o.

https://www.zf.com/site/locations/en/europe/serbia_locations/serbia.html

Energy Scouts optimize compressed air system at ZF Serbia with four measures

The plant of global automotive supplier ZF in Pancevo (Serbia) is home to an e-mobility division and a research and development center with around 750 employees.

The Energy Scouts Andriana Petrović, Miodrag Njagulj and Ljubiša Kordić identified opportunities for



©AHK Serbia

optimization of the compressed air system. They focused on the compressor system that supplies the production processes with compressed air.

The Energy Scouts from ZF:
Ljubiša Kordić, Andriana Petrović,
Miodrag Nagulj and lecturer
Zoran Jovanović in front of the
compressor

By checking for leaks and implementing four measures, such as regulating the compressed air level to the lowest level, lowering the intake air temperature and optimizing the compressor types, they achieved an increase in system efficiency of 31%. With investment costs of 2,500 € and annual energy savings of around 30,000 € the project paid off after just one month.



©AHK Serbia

Energy Scout teams also share their knowledge across generations. Here with YEE project manager Milan Krstić from the AHK Serbia (2nd from left)

Their focused approach convinced the jury and secured them victory in the 2021 competition with 23 practical projects and teams.

Sector: Education/school

Energy source: Electrical energy

Energy savings potential: 4.1 MWh electricity/a

CO₂ savings potential: 2.9 t/a

Potential cost reduction: 515 €/a

Investment costs: 1,909 €

Amortization period: 3.7 years



Lighting



Energy/Electricity

Company:

73. Schule Sofia „Vladislav Gramatik“

<https://73su.bg/>

Energy Scouts from the 73rd School “Vladislav Gramatik” reduce electricity costs and develop a digital platform for further project ideas

The “Vladislav Gramatik” vocational high school in Sofia (Bulgaria) took part in the Energy Scout qualifications. Seven Energy Scouts, Aleksandar Stefanov, Veselin Goranov, Kian Meyzinev, Hristo Poibrenski, Gergana Tatarska, Ivana Ivanova and Kristina senova, identified the optimization of the lighting in the school building as a practical energy efficiency project after the five-day workshop. By installing motion sensors in less frequented areas of the school, they reduced annual electricity consumption by 4,176 kWh and saved 2.9 tons of CO₂ emissions.

They also developed further project ideas on a specially created homepage for Young Energy Europe. These included the replacement of paper books with e-books and the use of heat pumps for heating, cooling and hot water. Their application-oriented approach convinced the jury at the national award ceremony, which is why they won the special prize. Their project had a multiplier effect within the school, the school community and beyond by raising awareness among parents, serving as best practice in education and encouraging potential Energy Scouts to take part in the qualification program.



© 73. SU “Vladislav Gramatik”

The Energy Scouts selecting the motion sensors. The consultation took place on site at the school with a team of technicians.



© 73. SU “Vladislav Gramatik”

The Energy Scouts Ivana Ivanova, Gergana Tatarska, Veselin Goranov, Kristina Tsenova, Aleksandar Stefanov, Hristo Poibrenski, Kian Meyzinev with their Teacher and mentor Stefka Petkova (1st from right).

Award ceremony for the best European Energy Scout teams of 2021 and 2022 in Berlin



©YEE / UNK / Wagenzik

Stefan Wenzel, Parliamentary State Secretary at the Federal Ministry for Economic Affairs and Climate Action, welcomes the Energy Scouts



©YEE / UNK / Wagenzik

Dr. Achim Dercks, Deputy Managing Director of the DIHK, emphasizes the high relevance of energy efficiency



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Czech teams at the international award ceremony 2023 in Berlin. From left to right Lis Blume, Moderator, Dita Šépková (AHK Czech Republic), PStS Stefan Wenzel (BMWK), three Energy Scouts from Asahi CE & Europe Services s.r.o., Energy Scout from Pyrotek CZ, s.r.o. and Dr. Achim Dercks (DIHK)

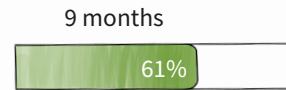
From left to right: Sofie Geisel (DIHK), Ulrike Leis (EUKI), Eva Holubek (AHK Slovakia), Energy Scouts from Robert Bosch, spol. s.r.o. and Volkswagen Slovakia, a.s., Ralf Stoffels (SIHK zu Hagen, DIHK)



©YEE / UNK / Schicke

Energy Scouts' practical projects - degree of implementation

Participating companies are already realizing 61% of the planned electricity savings within nine months



Do you want rapid savings results or to become climate neutral in the long term?

Energy Scouts know their companies and design customized practical projects. Projects to eliminate micro-leaks in compressed air systems are often the best in terms of amortization time. Energy Scouts implement these quickly, only small investments are required and the savings potential is high. Lighting projects lie in the middle range. Photovoltaic system factory roofs or

open spaces, on the other hand, require a lot of lead time for planning and approval processes and rather high initial investments, but provide green electricity for more than 20 years and reduce energy costs to a minimum.

If all practical projects were implemented as planned, the European companies involved would trigger investments of 72.8 million euros in energy efficiency measures and renewable energies.

Practical project categories

The Energy Scouts designed a total of 361 practical projects in their companies. The most popular topics in the practical projects were:



Lighting

69 projects



Photovoltaics

54 projects



Energy management

27 projects



Mobility

21 projects



Compressed air systems

20 projects



Heating

16 projects



Energy/Electricity

16 projects



System optimisation

16 projects



Resource efficiency

15 projects



Utilisation of waste heat

13 projects



Process optimisation

12 projects



Recycling

12 projects

What can Energy Scouts achieve in a company?

Energy Scouts look for and find efficiency potentials, which they utilize in practical projects. This is how they contribute to climate protection as well as save energy and resources at the same time.

Each Energy Scout identifies an average reduction potential of

155 tons CO₂

per year in the company.

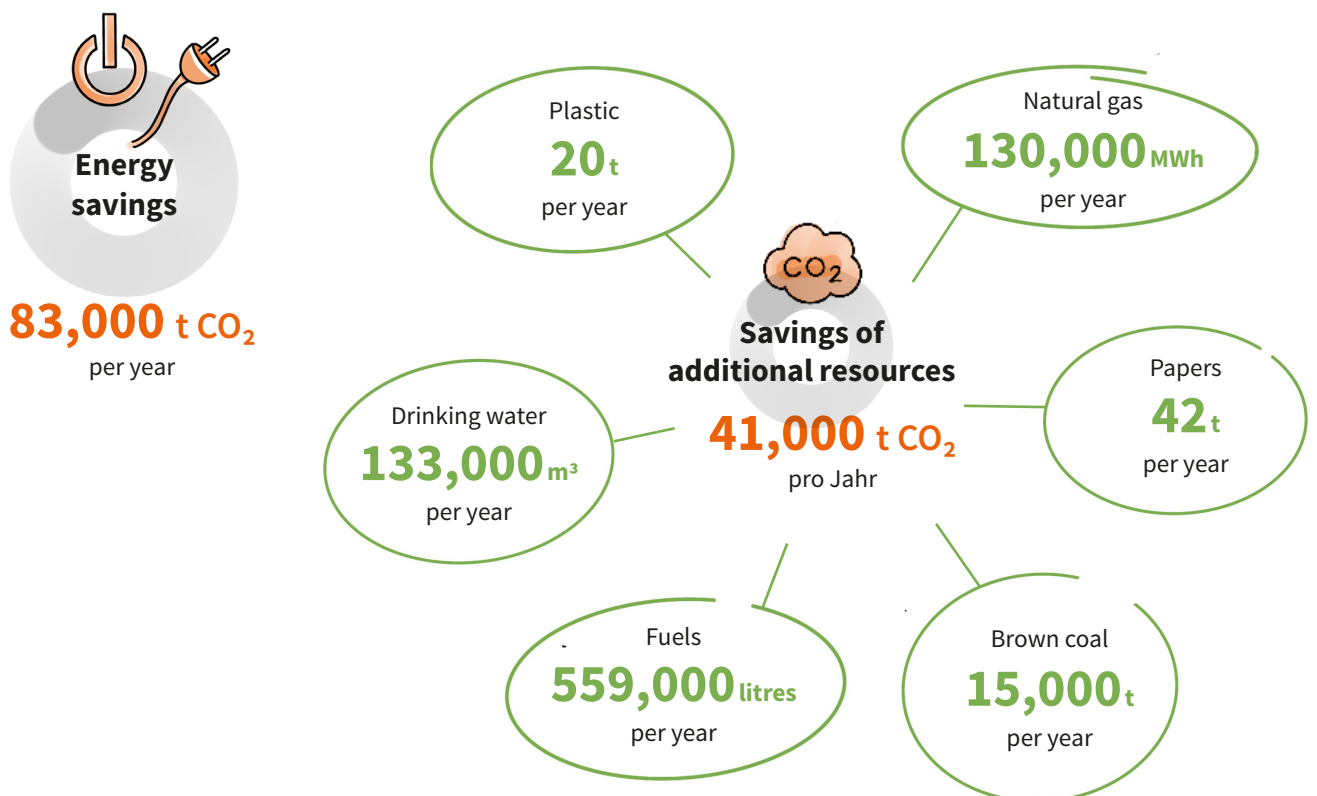


Each Energy Scout identifies an average savings potential of

152 MWh electricity

per year in the company.

Overview of potential savings in electricity & resources



We would like to stay in contact with you!



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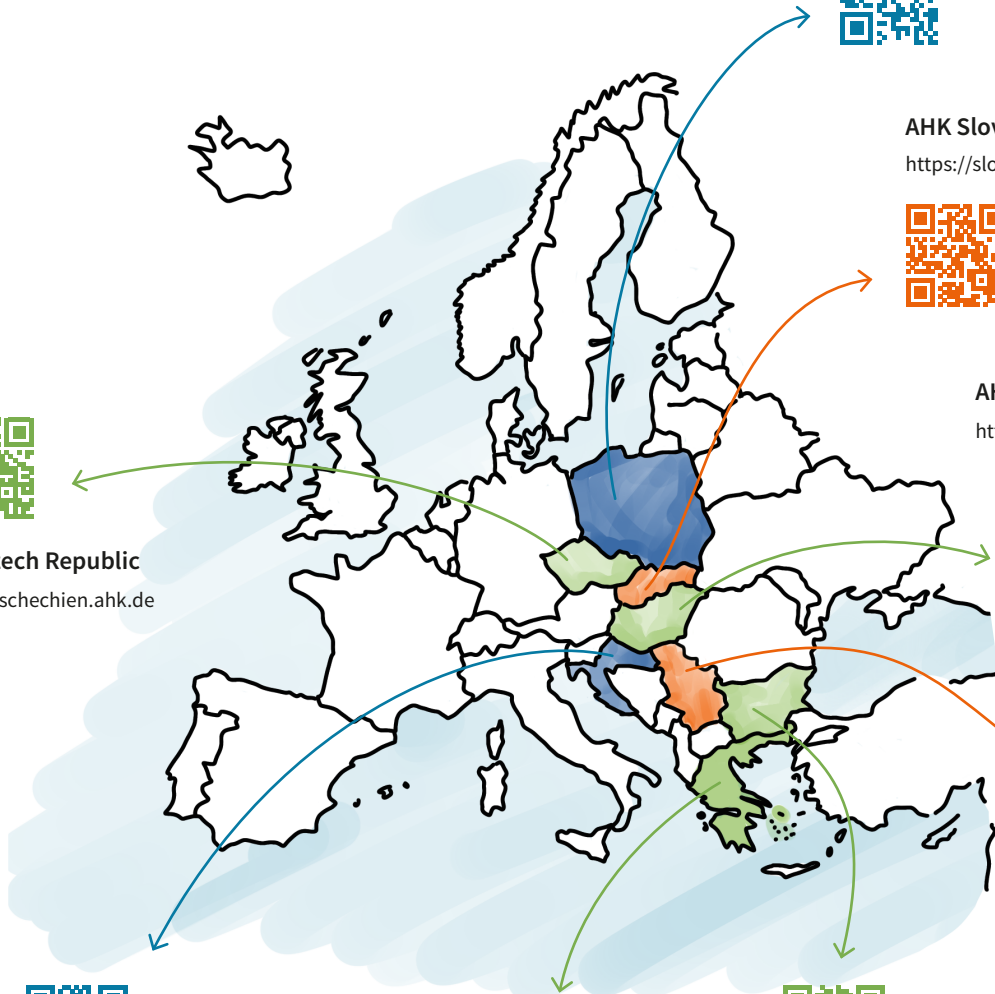
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