



INFO-GEOTHERMAL

Podpiranje učinkovite kaskadne uporabe geotermalne energije z dostopom do uradnih in javnih informacij /

Supporting efficient cascade use of geothermal energy by unlocking official and public information

Delovni sklop T4 – Mreženje za spodbujanje razvoja geotermalne energije / Networking to foster geothermal development

Aktivnost T 4.2 – Vzpostavitev nacionalnega geotermalnega omrežje / Establishment of a national geothermal network

Dosežek DT 4.2.1 - Kodeks ravnanja (pregled obstoječih praks) / Code of conduct (Overview of current practice)

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Projekt INFO-GEOTHERMAL sofinancirajo Islandija, Lihtenštajn in Norveška s sredstvi Finančnega mehanizma EGP v višini 1.073.529,41 €. Namen projekta je podpiranje učinkovite kaskadne uporabe geotermalne energije z dostopom do uradnih in javnih informacij.















Vodilni partner / Lead partner: Geološki zavod Slovenije

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1 Abstract

In aim to reach one of the main objectives of the international project INFO-GEOTHERMAL and establish the Slovenian association in the field of geothermal energy, a detailed overview of some of the existing associations had to be done. We checked their official websites and statutes, which are formally written and legislated documents, serving as a permanent rule. The chosen organizations were: Geothermie Österreich (GTÖ), Centro de Excelencia Geotermia de los Andes/Andean Geothermal Center of Excellence (CEGA), HUGE - Hrvatska udruga za geotermalnu energiju/CROGEA - Croatian Geothermal Energy Association, GEORG - GEOthermal Research Group, Unione Geotermica Italiana/Italian Geothermal Union (UGI), Bodemenergie Nederland, Geothermie Nederland and Polskiego Stowarzyszenia Geotermicznego/Polish Geothermal Association (PSG). The comparison has shown that the present organizations are roughly similar. They are all public and have a membership fee, with exception of the two research clusters with employees (CEGA and GEORG). The organizations are mostly working on promoting geothermal energy, participating in various projects in the field of geothermal, as well as publishing articles, providing information to the public, organizing seminars, webinars, and other trainings. They represent a connection between universities, scientific institutions, geothermal power companies, engineering consultancies, clean energy start-ups and public institutions and participate in the development of the geothermal network. The most important element of each organization is the official website, which is the main tool for contacting and gaining all the information about the organization (its aim, main results and products, events, membership, articles, etc.). After the comparison of the chosen organizations, we concluded that a well-organized association is a crucial element of development in the field of geothermal energy. Therefore, with establishing such an organization in Slovenia would be a great achievement in the process of development in the Slovenian field of geothermal.

2 Povzetek

Z namenom, da bi dosegli enega izmed glavnih ciljev mednarodnega projekta INFO-GEOTHERMAL ter ustanovili slovensko združenje na področju geotermalne energije smo naredili podroben pregled izbranih obstoječih združenj. Pregledali smo njihove uradne spletne strani in statute, ki predstavljajo uradno napisane in zakonsko potrjene dokumente, ki delujejo kot stalno pravilo. Izbrana združenja so bila sledeča: Geothermie Österreich (GTÖ), Centro de Excelencia Geotermia de los Andes/Andean Geothermal Center of Excellence (CEGA), HUGE - Hrvatska udruga za geotermalnu energiju/CROGEA - Croatian Geothermal Energy Association, GEORG - GEOthermal Research Group, Unione Geotermica Italiana/Italian Geothermal Union (UGI), Bodemenergie Nederland, Geothermie Nederland in Polskiego Stowarzyszenia Geotermicznego/Polish Geothermal Association (PSG). Primerjava je pokazala, da so si omenjena združenja na splošno podobna. Vsa so javna in imajo plačljivo članarino, z izjemo dveh raziskovalnih clustrov (CEGA in GEORG). Združenja večinoma delajo na promociji geotermalne energije, sodelujejo na različnih projektih na področju geotermije ter objavljajo članke, podajajo informacije širši javnosti, organizirajo seminarje, webinarje in druga izobraževanja. Predstavljajo povezavo med univerzami, znanstvenimi ustanovami, geotermalnimi podjetji, inženirskimi svetovalnimi podjetji, novoustanovljenimi sistemi za čisto energijo ter javnimi ustanovami, in sodelujejo v razvoju geotermalne mreže. Najpomembnejši element vsakega združenja je uradna spletna stran, ki je glavno orodje za kontaktiranje in pridobivanje vseh informacij o združenju (njegov namen, glavni rezultati in dosežki, dogodki, včlanitev, članki, itd.). Po primerjavi izbranih združenj smo prišli do zaključka, da je dobro organizirano združenje ključen element razvoja rabe geotermalne energije. Posledično bi bila ustanovitev tovrstnega združenja v Sloveniji izjemen dosežek, ki bi naredil velik korak na slovenskem območju geotermije.















Introduction 3

One of the main objectives of the project INFO-GEOTHERMAL is to establish a Slovenian association in the field of geothermal energy. Therefore, it is crucial to understand the mechanism of establishment - from the first steps to the finish details. This report is written in English as it is a base overview. However, the second part of our work comprises elaboration of the funding document of the new Slovenian geothermal energy association and the latter is a separate report and written only in Slovenian language.

To understand how other similar already existing associations work, we compared associations and other organizations from Austria, Chile, Croatia, Iceland, Italy, Netherlands, and Poland. The chosen organizations were: Geothermie Österreich (GTÖ), Centro de Excelencia Geotermia de los Andes/Andean Geothermal Center of Excellence (CEGA), HUGE - Hrvatska udruga za geotermalnu energiju/CROGEA - Croatian Geothermal Energy Association, GEORG – GEOthermal Research Group, Unione Geotermica Italiana/Italian Geothermal Union (UGI), Bodemenergie Nederland, Geothermie Nederland and Polskiego Stowarzyszenia Geotermicznego/Polish Geothermal Association (PSG). Their funding documents were available either on websites or provided by association representative.

Depending on the purpose and definition of the association different membership fee apply. Usually, if it is a governmental association or a research institute, there is no membership fee, as the association consists mostly of its employees. Otherwise, various fees must be paid, depending on the income or number of employees at a company, their status (private or public) and status of an individual (students and retired people usually get a discount). Comparison of their statutes has shown many similarities among the chosen associations. Each statute is consisting of the definition of the association, its full name and acronym, as well as a definition of possible members and whether a membership fee is acquired but not its amount. That is available on the official website.

The process of establishing an organization is slightly different in every country, although it has many common elements. Usually, some websites can be found with the whole procedure of gaining a licence in a chosen country, as explained in detail.

Code of conduct

Statute is a formally written and legislated document, which serves as a permanent rule. It is divided to different articles, addressing various topics related to the operation of a certain organisation. The articles usually define the official company name, its registered seat, definition and finances - profit or non-profit), appearance of the official logotype, who is the representative (e.g. president, vice-president or the secretary), main aim and terms of reference, whether the company is public or private, who can become a member and types of membership, board members (e.g. president, vice-president, secretary) and their duties, annual/monthly assembly and what can be discussed at an assembly, elections, property and company cancellation.

In this report we compared statutes of companies in Austria, Chile, Croatia, Italy, Netherlands, Poland, and Iceland.













5 Information about the chosen organizations

Figure 1 Basic information about the organizations, compared in this report.

Full name	Acronym	Country	City	Definition	
Geothermie Österreich	GTÖ	Austria	Vienna	non-governmental organisation (NGO)	
Centro de Excelencia Geotermia de los Andes / Andean Geothermal Center of Excellence	CEGA	Chile	Santiago	Chilean national agency for research - ANID	
HUGE - Hrvatska udruga za geotermalnu energiju / CROGEA - Croatian Geothermal Energy Association	HUGE / CROGEA	Croatia	Zagreb	Croatian association of citizens, founded with aim to achieve its main objects; NGO	
GEORG - GEOthermal Research Group	GEORG	Iceland	Reykjavik	non-profit organization (since 2016) which aims at promoting research and development of geothermal resources in a sustainable way and contribute to reducing the world's dependence on carbon-based energy sources	
Unione Geotermica Italiana / Italian Geothermal Union	UGI	Italy	Milan	independent, non-profit, apolitical association	
Bodemenergie Nederland	BodemenergieNL	Netherlands	Naarden	renewable energy semiconductor manufacturing, which is a part of the Soil Energy Industry Association	
Geothermie Nederland	1	Netherlands	The Hague	Dutch association for companies and institutions actively engaged in geothermal energy	
Polskiego Stowarzyszenia Geotermicznego / Polish Geothermal Association	PSG	Poland	Kraków	non-governmental and non-political organization; professional, scientific and educational association	













Figure 2 Information about the membership fee, its type and who can become a member of the chosen organization.

Politicing Stowartyszenia Cechemini Osterreich Ves (30 - 1000 €) Politicing Stowarty Stowarty Politicing Pol	Full name	Membership fee	Type of membership	Who can become a member?
Anders Geothermal Center of Excellence HUCE - Hystalista udrugs za gestermatina energipi. CROCEA - Corollan Geothermal energipi. CROCEA - Corollan Geothermal Research Group Fes (20 - 1000 5) Fes (20 - 255) 6 Exciluling VATT) Geothermie Nederland Geothermie Nederland Geothermie Nederland Geothermie Nederland Geothermie Nederland Fes (200 - 255) 6 Fes (300 - 255) 7 Fes (300 - 25			private, private reduced (students up to 27 years old and retired persons), small companies, other companies, non-profit (universities, colleges, non-profit organisations, research institutions and	natural persons, students, retired persons, employees from companies and enterprises (austrian or foreign) as well as universities, colleges, non-profit organisations, research
gestermain energin / Geothermal Energy Association No No / regular, honorary or founder general acts of the association founder members can become individuals, legal persons and organizations, which contribution financially to the association founder members can become individuals, legal persons and organizations, which contribution financially to the association founder members can be a sociation founder members can be come individuals, legal persons and organizations, which contribution financially to the association founder members and organizations, which contributions and utilization of geothermal energy, Corporate (companies, institutes and industries, directly or indirectly involved in research in promoting the use of geothermal energy, corporate (companies, institutes and industries, directly or indirectly involved in research in promoting the use of geothermal energy, employees from companies, institutes and industries, directly or indirectly involved in research, production and utilization of geothermal energy, employees from companies, institutes and industries, directly involved in research, production and according to the modalities indicated in the rules). Junior (university and secondary school students or any discipline, as long as they are 16-25 years of the phase or activate the amount of the production of the dependent companies, independent companies, independen	Geotermia de los Andes / Andean Geothermal Center	No	/	1
Research Group Societagories: Individual interested in geothermal energy), Corporate (companies, institutes and industries, directly or indirectly involved in research, production and utilization of geothermal resources, or that are interested in promoting the use of geothermal energy), Supporting (same target up as for Individual or Corporate, if they pay significant one-off contributions, or an annual membership fee for the number of years indicated in the rules). Junior (university and secondary school students, or lary discipline, as long as they are 16-25 years out; they have a reduced membership fee and my participate in all the UGI activities as all the other members (category 1 (drilling companies, consultancy) firms, age 16-25 years of any discipline, as long as they are 16-25 years out; they have a reduced membership fee and my participate in all the UGI activities as all the other members) Societagory 2 (consultancy firms), Category 3 (companies with 1 to 3 employees) Societagory 2 (consultancy firms), Category 3 (companies, institutions that can contribute to the objectives of the Bodemenergie branch association	geotermalnu energiju / CROGEA - Croatian Geothermal Energy	Yes	regular, honorary or founder	members can become individuals, legal persons and organizations, which contribute
individuals interested in geothermal energy). Corporate (companies, institutes and industries, directly or indirectly involved in research, production and utilization of geothermal resources, or that are interested in promoting the use of geothermal resources or that are interested in promoting the use of geothermal resources, or an annual membership fee for the number of years indicated in the rules all desert double the amount set by the Board of Directors). Honorary (persons who obtain such recognition within the limits and according to the modalities indicated in the rules). Junior (university and secondary school students) and conditing to the modalities indicated in the rules). Junior (university and secondary school students) of any discipline, as long as they are 16-25 years old; they have a reduced membership fee and my participate in all the UGI activities as all the other members) Yes (500 - 2250 € excluding VAT) A categories: Category 1 (drilling companies, installation companies and other organisations). Category 2 (cornsultancy firms), Category 3 (c		No	1	/
Bodemenergie Nederland Yes (500 - 2250 € excluding VAT) Yes (500 - 2250 € excluding VAT) Yes (basic contribution is 2000 €) Yes (basic contribution) Ye		Yes (20 - 1000 €)	individuals interested in geothermal energy), Corporate (companies, institutes and industries, directly or indirectly involved in research, production and utlization of geothermal resources, or that are interested in promoting the use of geothermal energy), Supporting (same target group as for Individual or Corporate, if they pay significant one-off contributions, or an annual membership fee for the number of years indicated in the rules at least double the amount set by the Board of Directors), Honorary (persons who obtain such recognition within the limits and according to the modalities indicated in the rules), Junior (university and secondary school students, of any discipline, as long as they are 16-25 years old; they have a reduced membership fee and my participate in all the UGI activities as all the other	companies, institutes and industries, directly or indirectly involved in research, production and utilization of geothermal resources, or that are interested in promoting the use of geothermal energy, persons who obtain recognition in the field of geothermal, university and secondary school students of
Heat operator (one doublets or plans to do so); Single operator (one doublet or triplet); Proprietorship; Small company with < 200,000 € turnover in geothermal energy (50 % discount on the membership fee); Company or institution, with a turnover between 600,000 and 2,000,000 € in geothermal energy; Company or institution with more than 2,000,000 € turnover in geothermal energy; Heat operation; Other (basic contribution) Polskiego Stowarzyszenia Geothermal Association Polskiego Stowarzyszenia Geothermal Association and accepting its objectives and who will declare permanent financial or material assistance and will be accepted by the Board on the ba of a written agreement/declaration; an honorary member may be an individual with outstanding achievemnts in the field of geothermal permanent financial or materi	Bodemenergie Nederland	,	installation companies and other organisations), Category 2 (consultancy firms), Category 3	installation companies, independent companies, consultancy firms and smaller companies (1-3 employees), system administrators and operators, designers and consultants, other organizations, companies or institutions that can contribute to the objectives of the Bodemenergie branch
Polskiego Stowarzyszenia Geothermal Association Yes (except an honorary member) Ordinary, supporting or honorary ordinary, supporting or honorary frealization of the objectives of the association and accepting its objectives and who will declare permanent financial or material assistance and will be accepted by the Board on the bof a written agreement/declaration; an honorary member may be an individual with outstanding achievemnts in the field of geothermics or particularly meritorious for the realization of the objectives of the association and accepting its objectives and who will declare permanent financial or material assistance and will be accepted by the Board on the ba of a written agreement/declaration; an honorary member may be an individual with outstanding achievemnts in the field of geothermics or particularly meritorious for the association and accepting its objectives and who will declare permanent financial or material assistance and will be accepted by the Board on the ba of a written agreement/declaration; an honorary member may be an individual with outstanding achievemnts in the field of geothermics or particularly meritorious for the realization of the objectives of the association and accepted by the Board on the bar of a written agreement/financial or material assistance and will be accepted by the Board on the bar of a written agreement/financial or material assistance and will be accepted by the Board on the bar of a written agreement/financial or material assistance and will be accepted by the Board on the bar of a written agreement/financial or financial or fina	Geothermie Nederland	,	multiple doublets or plans to do so); Single operator (one doublet or triplet); Proprietorship; Small company with < 200,000 € turnover in geothermal energy (50 % discount on the membership fee); Company or institution, with a turnover between 600,000 and 2,000,000 € in geothermal energy; Company or institution with more than 2,000,000 € turnover in geothermal	companies, installers and heat companies
GeoZS REPUBLIKA SLOVENIJA REPUBLIKA SLOVENIJA REPUBLIKA SLOVEN ponsulting companies and other entities	Geotermicznego / Polish Geothermal Association	honorary member)		and will be accepted by the Board on the basis of a written agreement/declaration; an honorary member may be an individual with outstanding achievemnts in the field of geothermics or particularly meritorious for the realization of the objectives of the association; members include: geologists, geophysicists, drillers, power engineers, representatives of other specialties, all operating heating plants and representatives of enterprises related to the use of water and geothermal energy,







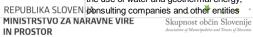








Figure 3 Information about the year of establishment and main objects of the organizations.

Full name	Since	Main objects
Geothermie Österreich	2002	acts independently of politics and business, supports awareness-raising and public awareness of the importance of geothermal applications for achieving future energy and climate goals, represents the interests of the members towards political decision-makers and wants to improve the legal and energy-political framework for the use of geothermal energy in Austria, is open to all technologies and covers various aspects of near-surface, medium-deep and deep geothermal energy, supports scientific exchange and the promotion of young people in Austria, supports strategic cooperation with related local interest groups, clubs and associations as well as sister associations in the EU and related international associations and platforms (e.g. International Geothermal Association - IGA), provides information and knowledge for the public in modern and easily accessible media
Centro de Excelencia Geotermia de los Andes / Andean Geothermal Center of Excellence	2011	establish a comprehensive geological model for the Andean geothermal systems, form highly trained professionals in basic and applied research in geothermal energy, promote a national and international networking with other world-class research centers, increase public awareness and promote geothermal as a renewable, clean and alternative energy, incorporate applied sciences and engineering
HUGE - Hrvatska udruga za geotermalnu energiju / CROGEA - Croatian Geothermal Energy Association	2021	promotion and coordination of scientific and professional education in geothermal energy, improvement and promotion of criteria for exploration and developmen of geothermal deposits within the principles of environmental protection, encouraging and enacting laws with peculiar legislation, rules and regulations for the development and use of geothermal energy, improve public opinion about the application of geothermal energy, enabling and simplifying the connection and exchange of data related to geothermal energy, forwarding information cooperation with national and international governmental, educational and private institutions and associations from the field of economy, advocating and propagation of information about cultural, scientific, social and other areas of life, as well as their publication in media and magazines, encouraging and organizing contacts between business entities and interested organizations and individuals, in order to encourage the development of inventive techical solutions, organization of expert meetings, seminars, round tables and symposium, promotion of the profession and other activities related to use of geothermal energy
GEORG - GEOthermal Research Group	2009	bring together players in the geothermal field and form a strong force for rapid progress and added value in geothermal research, engineering and design, supporting and promoting projects among the Group's members, in the field of geothermal research and development, organizing workshops and seminars addressing the most urgent issues and challenges of each time, maintaining a strong contact network among the members, promoting geothermal energy and research, both domestically and abroad
Unione Geotermica Italiana / Italian Geothermal Union	2001	to promote the use of geothermal energy in Italy, by spreading its knowledge among the public and at a appropriate political and administrative levels, and by stimulating activities aimed at, exploring, exploiting and utilizing natural heat; to promote the technical-scientific activities and achievements of geothermal energy in Italy abroad as well, in order to create more favourable conditions for the breakthrough of the Italian geothermal technology to international markets
Bodemenergie Nederland	1999	making optimal use of energy from soil through heat and cold storage by sharing knowledge and experiences by and for end users of geothermal energy, cooperation with relevant organizations and umbrella organizations, ensuring that geothermal energy technology makes a serious contribution to the objectives in the National Energy Agreement through knowledge transfer, helping the end users to optimize their system, improving the image of heat and cold storage in the soil, representing the interests of members at various levels, such as governments and fellow sector organizations
Geothermie Nederland	?	anchoring the role of geothermal energy in the energy transition, driving the necessary acceleration in the application of geothermal energy, with a clear and predictable policy framework (rules and laws) in combination with clear and fast procedures, a strong and bundled representation towards governments and citizens, improving business case and providing an appropriate incentive framework for the production and transport of sustainable energy to citizens, (horticultural) companies and industry, sharing knowledge even more intensively and boosting innovations (and standards) to make geothermal energy even safer and more reliable as a supplier of sustainable and affordable heat, contributing to a strong geothermal business climate in which companies can develop, targeted information and involvement of citizens as well as local and regional authorities in order to increase awareness of and support for geothermal energy
Polskiego Stowarzyszenia Geotermicznego / Polish Geothermal Association	2006	promoting geothermal energy through information on the state and development prospects in Poland and in the world, reliable information to the public and decision-makers about geothermal resources in Poland and possibilities of their use, cooperation with entities using water and geothermal energy, national and international cooperation in the development of knowledge about broadly understood geothermal energy (exploration and recognition of resources, development of wells and deposits, heating, heat pumps, healthcare and recreation, electricity generation, project financing and economics, legal issues, ecological and social aspects, etc.











Figure 4 Status of the organizations (public/private), official website, licence, and advantages and disadvantages of the websites.

Full name	Is it public?	Website	Licence	Advantages / Disadvantages
Geothermie Österreich	Yes	Internet 1	procedures licences in Austria (Internet 9)	website only in German, accessible on social media as well (LinkedIn, Facebook, Twitter), many online courses available
Centro de Excelencia Geotermia de los Andes / Andean Geothermal Center of Excellence	Yes	Internet 2	three main forms of business vehicles in Chile: (1) Corporations, (2) Companies by shares, (3) Limited liability companies (Internet 10)	website also in English, accessible on social media (Facebook, Twitter)
HUGE - Hrvatska udruga za geotermalnu energiju / CROGEA - Croatian Geothermal Energy Association	Yes	Internet 3	registered at the City Office for General Administration in Zagreb	website making still in progress, no information available since the establishment of the association
GEORG - GEOthermal Research Group	Yes	Internet 4	grant from the Science and Technology Policy Council of Iceland (Rannis)	website in English, available on social media (Facebook, Instagram, Twitter, YouTube), annual report, journal articles, presentations, projects overview, reports, theses and videos available
Unione Geotermica Italiana / Italian Geothermal Union	Yes	Internet 5	procedures licences in Italy (Internet 11)	website and most of the content is only in Italian, website is up to date, containing all the latest news and information about future events, information about geothermal energy in Italy and around the world, a map of geothermal poweplants in Italy, published articles, videos and useful links
Bodemenergie Nederland	Yes	Internet 6	procedures licences in the Netherlands (Internet 12)	website and Wiki Geothermal/Soil Energy only in Dutch, many online courses available
Geothermie Nederland	Yes	Internet 7	procedures licences in the Netherlands (Internet 12)	website also in English (with less information), separate website with information about geothermal energy (Internet 13), possibility for municipalities to gain first-hand knowledge and practical experience and participate in the challenges facing the sector
Polskiego Stowarzyszenia Geotermicznego / Polish Geothermal Association	Yes	Internet 8	Act of 7 April 1989 Law on Associations (consolidated text: Journal of Laws of 29.6 2003 No. 79 item 855 as amended)	basic information about operating geothermal heat plants in Poland available at the website









Figure 5 Main results and products of the chosen organizations.

Full name	Main results / products					
Geothermie Österreich	Geothermal Symposium, Geothermal Day, Long Night of Research, Geothermal webinars and recorded lectures					
Centro de Excelencia Geotermia de los Andes / Andean Geothermal Center of Excellence	developing some specific high-enthalpy (> 150°C) and low-enthalpy geothermal projects (< 90°C), publishing articles in various journals (e.g. Geothermics, Science of the Total Environment, Tectonics, Hydrological Sciences Journal, Geothermics, Journal of Geochemical Exploration, International Geology Review, Hydrometallurgy, Hydrogelogy Journal,)					
HUGE - Hrvatska udruga za geotermalnu energiju / CROGEA - Croatian Geothermal Energy Association	?					
GEORG - GEOthermal Research Group	successfully running several larger and smaller project offices, administrating research, and innovation projects in the energy sphere, becoming a platform for research driven collaboration between universities, scientific institutions, geothermal power companies, engineering consultancies, clean energy star-ups and public institutions, participating in the development of an expansive geothermal network in Europe and USA, shaping the financial vehicles and support programmes aimed at accelerating the uptake of geothermal energy in Europe and worldwide, providing expertise in applying for grants at the European and international level, forming a platform to promote knowledge on the geothermal energy resource, its utilization potential, sustainability, and environmental issues by organizing training and information sharing through courses, workshops, seminars, and conferences					
Unione Geotermica Italiana / Italian Geothermal Union	organized workshops, webinars, national meetings, participated in GEOFLUID EXPO International Conference 15th-18th September 2021 in Piacenza, participated at a conference ZeroEmission in November 2022					
Bodemenergie Nederland	Knowledge platforms (Wiki Geothermal Energy, Wiki Soil Energy (Internet 14),User Platform Soil Energy ATES Scan, Second Opinion, knowledge platform meetings, research projects					
Geothermie Nederland	proposal for an Acceleration of Geothermal Energy Action Plan as a response of the geothermal energy sector to the tightened climate targets and the government's approach to reduce the use of Russian natural gas (goal is 40-50 PJ in 2030)					
Polskiego Stowarzyszenia Geotermicznego / Polish Geothermal Association	development of a series of Geothermal Atlases and other fundamental works, as well as the practical use of geothermal energy in heating, balneology, recreation, etc.; it is the main organization representing geothermal energy in Poland, participating in international cooperation, including the main European and global organizations (European Geothermal Energy Council and the International Geothermal Association); it is the initiatior and main organizer of the National Geothermal Congresses - the most important national meetings of scientists and practicioners in the industry					















5.1 Comparison

The present organizations are roughly similar. All are public and have a membership fee (except CEGA and GEORG, which are both research clusters with employees). They are mostly working on promoting geothermal energy, participating in various projects in the field of geothermal, as well as writing articles, providing information to the public, organizing seminars, webinars, and other trainings. The organizations represent a connection between universities, scientific institutions, geothermal power companies, engineering consultancies, clean energy start-ups and public institutions and participate in the development of the geothermal network.

Each organization has their own policy about the membership. It is usually possible to apply for a certain membership online (via filling an online form or sending personal information to the official email), GTÖ, HUGE and PSG offer membership to every natural person, who pay the lowest membership fee. Some of them even provide a certain discount (e.g., for students, retired persons, honorary members, etc.). The highest membership fees are mostly for bigger companies and institutions. On the other hand, organizations such as Geothermie Nederland have a basic contribution of 2000 €, which is intended only for developers and operators of geothermal heat resources, consultancy firms, engineering companies, installers and heat companies, network operators and "knowledge partners". The members can then participate in all the events and elections and become an active part of the organization (their role in the organization is explained in the official statute in detail), with exception of UGI, where Junior Members (university and secondary school students, aged 16-25 years) cannot participate in elections of the UGI bodies or be elected.

Process of getting a licence, which gives a legal background for establishing an organization, is different in every country, depending on the type of organization. HUGE, for example, was registered at the City Office for General Administration in Zagreb, whereas GTÖ went through the whole process from contacting a lawyer to draft the articles of incorporation, to signing articles of association, paying the minimum share capital of 35.000 € (of which at least 17.500 € is paid in cash), opening a business account, and transferring the cash deposit. No matter the country, each organization needs notarized articles of incorporation, also known as the statute. Afterwards, a trade licence for an economic activity is needed. The final step is reporting to the tax office and the employees in the organization. The whole process of establishing an organization can be found on various websites (e.g., Internet 9-12), which simply explain every step from the beginning to the end.

The most important element of each organization is its official website, which is the main tool for contacting and gaining all the information about the organization (its aim, main results and products, events, membership, articles, etc.). A clear and well-organized website provides all the required information to its user and makes the organization easily accessible all around the world. The websites are mostly in native language of the country. However, an English version is sometimes available as well, although it might offer less contents then the original. Moreover, most of the organizations are also accessible on social media, such as LinkedIn, Facebook, Instagram, Twitter, or YouTube, where they regularly post and keep their followers up to date with their activities and upcoming events.















6 Conclusion

A well-organized association is a crucial element of development in the field of geothermal energy. Not only it is a medium between the scientists and the general public, but it also collects and provides information, organizes various events, publishes articles, and participates in different projects. An important part of an organization is to organize a clean and frequently updated website, which enables an immediate and easily accessible connection with people from all around the world. Moreover, being on social media is also an important step in advertisement and easy access to information.

However, it could not be negligible that younger organizations, such as HUGE which was established in 2021 needed some time to establish a website or any public information about them. Therefore, we conclude that establishing an organization is a long process, full of different smaller and bigger steps, which include many people and require a lot of time.

After examining the official websites and statutes in detail, we conclude that this type of organization would make a great step forward in the field of geothermal in Slovenia. Not only it would connect all the experts and public but would also collect all the information in this field and enable a long-term insight in research, projects, achievements, and events in Slovenia. Moreover, it would be a fundamental geothermal network for communication with people from associations abroad and exchanging gained knowledge and experience at seminars and other events.











7 Literature

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