



nagra.

2024 ANNUAL REPORT

nagra.

n

ANNUAL REVIEW

- 4** In conversation with President Lino Guzzella and CEO Matthias Braun

SUSTAINABILITY

- 9** Environmental protection does not end at Switzerland's border

FACTS & FIGURES

- 10** 40th anniversary of the Grimsel Test Site
- 12** Research at the Grimsel Test Site
- 13** Progress in project planning
- 14** New Nagra subsidiaries for construction and operation
- 15** Research at the Mont Terri Rock Laboratory
- 16** Submission of general licence applications

PORTRAITS

- 20** Jürgen Brommundt
- 22** Rocco Cipriano
- 24** Valentina Zampetti
- 26** Uschi Züger-Fankhauser

ORGANISATION

- 28** Board of Directors
Members of the Nagra Cooperative, Commissions and Statutory Auditor
- 29** Organigram of the head office
- 30** Executive Board

ANNUAL FINANCIAL STATEMENTS 2024

- 34** Comments on the annual financial statements for 2024
- 35** Income statement
- 36** Balance sheet
- 37** Cash flow statement
- 38** Note
- 43** Accumulated accounts
- 45** Notes on the accumulated accounts
- 47** Report of the Statutory Auditor

APPENDICES

- 50** Waste inventories and volumes
- 52** Picture credits



“The general licence applications provide us with a tangible foundation for constructive discussion.”

Matthias Braun, CEO

“The debate is now becoming more project-specific and reaching more members of society.”

Lino Guzzella, Präsident

“WE WELCOME A BROAD DEBATE”

President Lino Guzzella and CEO Matthias Braun look back on the demanding, work-intensive year 2024. They are also looking ahead to the debate on the deep geological repository, which can now begin.

What was your personal highlight of 2024?

Matthias Braun: The submission of our two general licence applications in November. And not just that: the quality of the documentation was high and we delivered it on time. We achieved this only two years after our last major milestone, when we announced the site for the deep geological repository in September 2022. This was a major effort by everyone working at Nagra. I take my hat off to them all.

Lino Guzzella: So do I. I was also impressed by how professionally, persistently and productively this important project is being pursued. And all of this without great fanfare. This perseverance is what defines the quality of an organisation. If you are going to run a marathon, these are the qualities to have.

Braun: Yes – along with the ability to deliver a sprint when the need arises. I sense an eagerness here at Nagra to make these efforts for the sake of this cross-generational project.

What significance do the two applications have for the local communities, for the siting region and for Switzerland?

Braun: We have now set a framework, with which we commit to where and how we eventually intend to realise the project. Within this framework, we are now developing the project towards a specific construction project. Moving beyond this and onto a political level, by granting the general licences for the deep geological repository in Nördlich Lägern and the encapsulation plant in Würenlingen, Switzerland’s voters will have expressed their endorsement for our project. This democratic legitimisation of our project is very important to us.

Guzzella: With the submission of the general licence applications, we are taking a major step into the decisive licensing phase. This formal phase comes with deadlines, for example, for the ongoing review of our application documentation.

The existing repository concept is to become a construction project. What is the difference between these two?

Braun: To date, our main task was to identify the safest site for the deep geological repository, at all times ensuring the protection of humans and





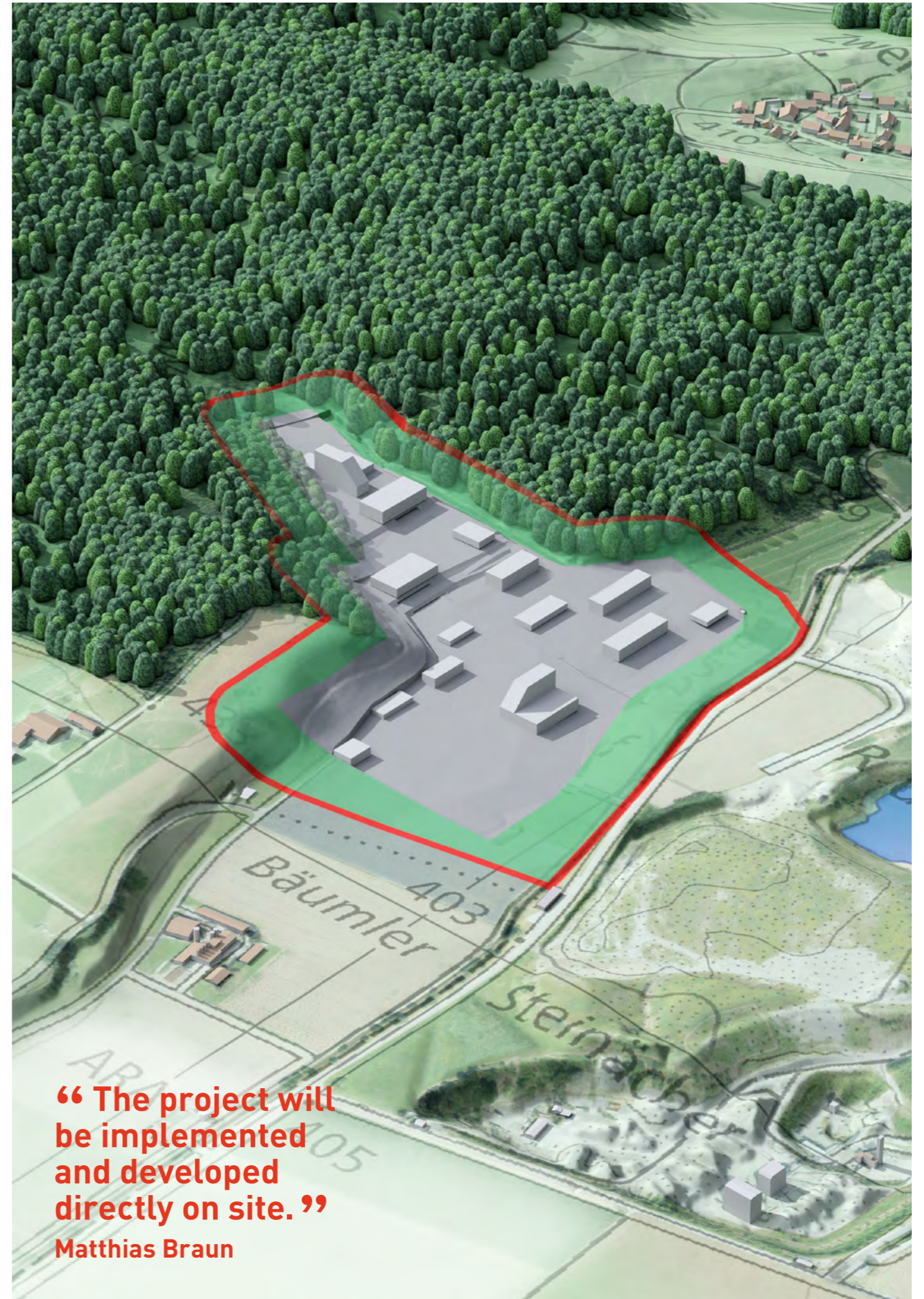
“I am impressed by how professionally this project is being pursued.” Lino Guzzella

the environment in accordance with legal requirements and with the dose limits stipulated in the guidelines of the Swiss Federal Nuclear Safety Inspectorate, ENSI. By explaining what makes Nördlich Lägern the most suitable site and outlining our repository concept in the general licence applications, we demonstrate that we have resolved these requirements. The next step is to develop the generic repository concept into a specific construction project, which means tailoring the project to the selected site and its unique conditions. This also includes ensuring that the construction project has minimal impact on the landscape and the subsurface. In this context, it is important to note that the submitted general licence applications do not specify in detail how the deep geological repository will be constructed. We have not yet determined the exact thickness of a concrete layer or the length of each electrical cable. Metaphorically speaking, we have given the project a frame and only now do we start painting the picture. The protection of humans and the environment will always be our top priority. Nothing will ever change that.

Nagra says it welcomes a broad societal debate. What is the benefit of that?

Guzzella: National politicians have not yet given much thought to the repository project. With the submission of the applications and once the experts have completed their peer review, these politicians will have to take a position. This makes the debate more concrete, more realistic and more wide-reaching.

Braun: I am looking forward to this debate. The documentation for the general licence applications provides us with a tangible foundation for constructive discussion.



“The project will be implemented and developed directly on site.”

Matthias Braun

“The better we develop the repository project on site, the better it will be received nationally.” Matthias Braun

Once the discussion reaches the national level: do the local communities risk playing second fiddle?

Braun: We expect the project to be discussed at a national level. However, implementation and development will take place on site, which means that the main impact will be felt by the local residents. Their concerns include, for example, access roads, privacy protection, noise pollution, lorry journeys, excavated material and spatial development in the broader and narrower sense. These topics might not be of national interest, but they are of great local interest. That is why we are also in close dialogue with the siting communities of Stadel and Würenlingen.

Guzzella: These two communities are key partners for the further development of the project. We will take their concerns into account as far as possible during implementation. We want to minimise the additional burden they have to bear on behalf of the nation. In principle, we take all local concerns and issues seriously. And we never lose sight of our top priority: the safety of the repository for humans and the environment.

Braun: At the same time, the referendum on the deep geological repository will be a national one. We are basically asking Switzerland whether it wants to solve the issue of radioactive waste disposal. The better we develop the repository project on site, the better it will be received nationally.

Re-entry into nuclear power or transmutation of radioactive waste: how do such debates impact Nagra’s work?

Guzzella: They don’t. Whether or not Switzerland opts for new nuclear power plants or transmutation: a deep geological repository will be needed regardless. As we have communicated repeatedly, this discussion will have no impact on our legal mandate. We have also stated that it is not up to us to decide on new power plants. This issue must be resolved at a national level.

What else did Nagra achieve in 2024?

Braun: We worked on multiple projects in 2024 that provide us with important data for project development. They include, for example, experiments in the underground research laboratories or collaboration with several universities and other research institutes. With the project development now underway, we also had to realign our organisation. Nagra has welcomed new employees to its organisation, and several of our existing employees will be given new responsibilities. We are adapting and evolving.

Guzzella: The Board of Directors has also welcomed new members, and they have settled in successfully. Overall, collaboration is proceeding very well.



Major construction projects are only authorised if they can be implemented sustainably. In the case of the deep geological repository, this is being scrutinised beyond our national borders.

The objective of the repository is to protect humans and the environment from radioactive waste in the long term. To meet this requirement, the project must, among other things, pass an Environmental Impact Assessment (EIA). This is standard procedure for major projects and must be taken into consideration early on in the planning process.

The project of the century of deep geological disposal is subject to an additional, special assessment: it falls under the so-called Espoo Convention, which means that environmental compatibility must be assessed across national borders.

THE FIRST STEP HAS BEEN TAKEN

Nagra submitted the general licence applications in November 2024. The application documentation included an Environmental Impact Report outlining the current status of all environmental areas relevant to the project. To determine this current status, field investigations and other studies were carried out.

The Environmental Impact Report demonstrates that Nagra will be able to realise the project in a sustainable manner. The most significant environmental impact is expected during the construction phase. Relevant environmental areas include the

crop rotation areas, the soil, the flora and fauna and their habitats as well as the landscape. In the Haberstal, where the surface facility is to be constructed, the planned project perimeter will affect agricultural and forested areas. The agricultural area, for example, would have to be replaced with an equivalent expanse of land. However, it is still too early to specify these measures in detail. This will be done later with the construction licence application. That is standard procedure. In contrast to the vast majority of construction projects, however, the deep geological repository must first obtain a general licence.

The Federal Office for the Environment (FOEN) is responsible for the environmental regulations. Later, it will also oversee the construction and operational phases and decide which specific measures Nagra will have to implement.

INVOLVING NEIGHBOURING COUNTRIES

As mentioned above, the environmental impact of the project must be assessed across national borders. This means that affected neighbouring countries must be informed and consulted at an early stage. They are invited to participate in the review and ensure that environmental aspects are taken into account across national borders.



Festive colours at the anniversary celebration of the Grimsel Test Site

FACTS & FIGURES

➔ 40TH ANNIVERSARY OF THE GRIMSEL TEST SITE

Groundbreaking research on radioactive waste disposal

The Grimsel Test Site celebrated its 40th anniversary in 2024, with a special emphasis on the international exchange between science and practice.

The Grimsel Test Site is a very special place. For 40 years, scientists have researched, developed and experimented with the aim of ensuring the safe disposal of radioactive waste. The Grimsel Test Site is located 450 metres deep in the Grimsel Massif and serves as an international research facility for over 20 organisations from 12 countries. Theory and practice merge here: experts from all over the world and from a wide range of disciplines work together to develop solutions to a global challenge.

“The Grimsel Test Site is not a purely Swiss research laboratory,” emphasises Florian Kober, Head of the Grimsel Test Site. “It is a joint project to which all partners contribute their expertise and resources. Whether

Canada, Finland or Japan: global collaboration shows how similar the challenges are when it comes to dealing with the world’s radioactive waste. Despite country-specific differences in geology, reactor types, and societal approaches to the diverse topic, all countries ultimately share the goal of creating safe solutions for future generations.”

SHINING THE RIGHT LIGHT ON THE TUNNELS

At the anniversary event in autumn 2024, participants had the opportunity to witness ongoing experiments such as the HotBENT Project. This experiment investigates the behaviour of the multi-barrier system at elevated temperatures. This safety-related aspect has attracted a great deal of international attention.



Florian Kober, Head Grimsel Test Site. On the right Ingo Blechschmidt, Head Applied Geoscience & Intl. Collaboration

Other innovative projects were also presented, such as the use of AI. The event also provided partner organisations with the opportunity to present their programmes and exchange ideas. “The anniversary event was not a conference in the traditional sense,” Kober continues. “It was about discussing and developing ideas in an inspiring environment while also cultivating and maintaining our network.” This approach is also reflected in the plans for the future of the Grimsel Test Site. In recent years, the primary focus was on demonstration experiments. In contrast, it is now increasingly moving towards

the further development of existing concepts or on specific related issues. Decked out with impressive light installations, the otherwise scientifically sober gallery was transformed into an atmospheric stage bursting with colours and shapes, lending the venue a completely new, almost magical aura, and impressing the guests. “It required a huge effort to put it all together, but the feedback from the guests was overwhelmingly positive,” says Annika Breu from the organisation team, looking back on the successful event with satisfaction. “For many, it was a unique opportunity to experience the lab-



International exchange next to the model for the deep geological repository



Top: Grimsel Hospice, bottom: dialogue workshop with various stakeholders

oratory from an entirely new perspective and to view this generally secluded scientific universe in a completely different light.”

AN ARCHIVE AS A BASIS FOR THE FUTURE

Four decades on, the Grimsel Test Site remains relevant. As one of the few underground research laboratories worldwide authorised to carry out experiments with radionuclides in rock formations, it offers unique research and development opportunities. The expertise developed here serves as a knowledge archive and as a foundation for the next steps. “Our work is not an end in itself. We are pursuing a clear goal: the safety of future generations,” says Kober proudly.

If you would like to experience this research live, you will have the opportunity to do so on the Open Day on 20th September 2025.



→ Register now at nagra.ch/en/visit-us

➔ RESEARCH AT THE GRIMSEL TEST SITE

Experiments in the crystalline rock continue

Fractured granite: how do radionuclides migrate through it? Experiments are being conducted to help answer this question.

As in Switzerland’s second underground research laboratory, Mont Terri, the Grimsel Test Site also investigates how radioactive particles – known as radionuclides – migrate through the rock. The most significant difference between the two laboratories is that in Grimsel, research is carried out in granite, while in Mont Terri, experiments are conducted in the Opalinus Clay.

The Grimsel Test Site, which is operated by Nagra, also welcomes international research partner organisations. To keep abreast of the latest developments, Nagra is also involved and interested in experiments conducted by these organisations.

PARTICLES MIGRATE THROUGH THE ROCK

The so-called Long-Term Diffusion (LTD) experiment is currently underway at the Grimsel Test Site. Its objective is to investigate the diffusion of radionuclides, i.e. the slow migration of these particles through granite. The LTD experiment is carried out in fractured rock whose surfaces once scraped past each other. In a nutshell, this is how the experiment works: a hole is drilled into the fractured granite and an aqueous solution containing radionuclides is injected. Some types of radionuclides are bound more strongly by the rock and are therefore better retained, others less so. Two experiments will investigate how differently the radionuclides migrate through fractured granite. The objective is to find out how dangerous radioactive particles can be if they escape from disposal canisters at some point in the distant future.

DRILLING HOLES INTO THE ROCK

The first experiment lasted around two years and ended in September 2024. The second was started immediately afterwards, and analysis of the samples began in spring 2025. As in the first experiment, the rock surrounding the test borehole was extracted in the second experiment. The concentrations of radionuclides are currently being determined, specifically in relation to the distance they have travelled.



→ More information on the LTD experiment can be found on the website of the Grimsel Test Site



Alain Bourgeois, BIM Manager, and Jürg Neidhardt, Senior Project Lead BIM, in front of a 3D model of the deep geological repository

➔ PROGRESS IN PROJECT PLANNING

Nagra is constructing the digital repository model

Experts from a wide range of disciplines are involved in the project of the century of deep geological disposal. To work together successfully, they need a shared platform. Alain Bourgeois and Jürg Neidhardt explain how this platform works.

In the past, construction projects were planned on paper. “When thinking back to how complex plants used to be planned, it is easy to imagine how challenging it would have been to determine whether, just from looking at the construction blueprints, a ventilation duct might collide with an intersecting pipeline,” says Alain Bourgeois, BIM Manager at Nagra.

The acronym BIM stands for Building Information Modelling. “In those days, spatial conflicts were only discovered right at the construction site. Having to solve them then and there caused additional costs and delays,” says Bourgeois, summarising the challenge. The simple above-mentioned example illustrates the purpose of BIM: before the start of actual construction, the project is built in the form of a digital 3D model.

In November 2024, Nagra submitted the general licence applications for a deep geological repository at the Nördlich Lägern site to the federal government. Within the framework described in the application, Nagra will develop the construction project over the next few years.

However, planning and constructing a deep geological repository is complex and therefore, from an engineering perspective, far more challenging than a conventional structure. The planning, organisation and management of the construction work alone is expected to amount to millions of work hours. This major project will also involve the services of numerous specialised planning companies: architects, structural engineers, shaft and tunnelling engineers or project controllers – to name just a few.

A project of this magnitude requires collaboration among experts from a wide range of disciplines. All must have access to information and data from the other specialist planners. This creates mutual dependency—or, in other words, a dense network with many interfaces. To ensure this network functions smoothly, a digital construction planning tool is used: BIM.

AN ALL-ENCOMPASSING PLATFORM

In a BIM construction project, the specialist planners develop their plans digitally in 3D. A coordinator continuously merges these three-dimensional models into one

all-encompassing model and makes it available to all project members on a virtual work platform – the common data environment. BIM allows assigning any amount of information to each component of the deep geological repository. For example: aside from height and width, the data on a door can also include information on the material, the supplier and maybe even the fire resistance classification. Or, to return to the above-mentioned example with the ventilation duct and the pipeline: if conflicts arise between individual plant components, everyone involved in the planning can point this out. He or she can highlight the relevant location directly in the digital model and use the platform to communicate the problem to those planners who are also impacted by the conflict. Various solutions can then be discussed to resolve the issue.

The BIM method can also be used to develop and visualise detailed planning of the entire construction process. “This allows us to show exactly which part of the deep geological repository will be built when. This is an enormous help in identifying and avoiding bottlenecks at an early stage during the various construction phases,” explains Jürg Neidhardt, Senior Project Lead BIM at Nagra.

NAGRA'S DUAL ROLE

First and foremost, Nagra must take on the role of implementer organisation for the construction of the repository. At the same time, it has spent decades developing scientific and technical expertise in the disposal of radioactive waste. Nagra will therefore have two roles: that of implementer and that of specialist planner for nuclear safety.

To fulfil this dual role, Nagra must ensure that those employees involved in planning know how to use BIM. The first promising applications of the BIM method began in 2018. Since the end of 2021, Nagra has been steadily expanding its digital planning expertise with its own BIM team. Two years ago, the team started developing a workflow that relies on various specialised software programs. It can be used to analyse planning variants for the repository and, if necessary, adapt them much more rapidly than before.

A highlight in 2024 was the launch of a special development project aimed at using computers to semi-automatically create BIM models from key data. “As this eliminates much detailed manual work, the realisation time of such digital models can be massively reduced,” explains Neidhardt. The end product will be a kind of toolbox that Nagra’s future planning partners can use. “Nagra is therefore ideally positioned for the age of digital construction planning,” says Neidhardt.

➔ **EXPANDING NAGRA**

New Nagra subsidiaries for construction and operation

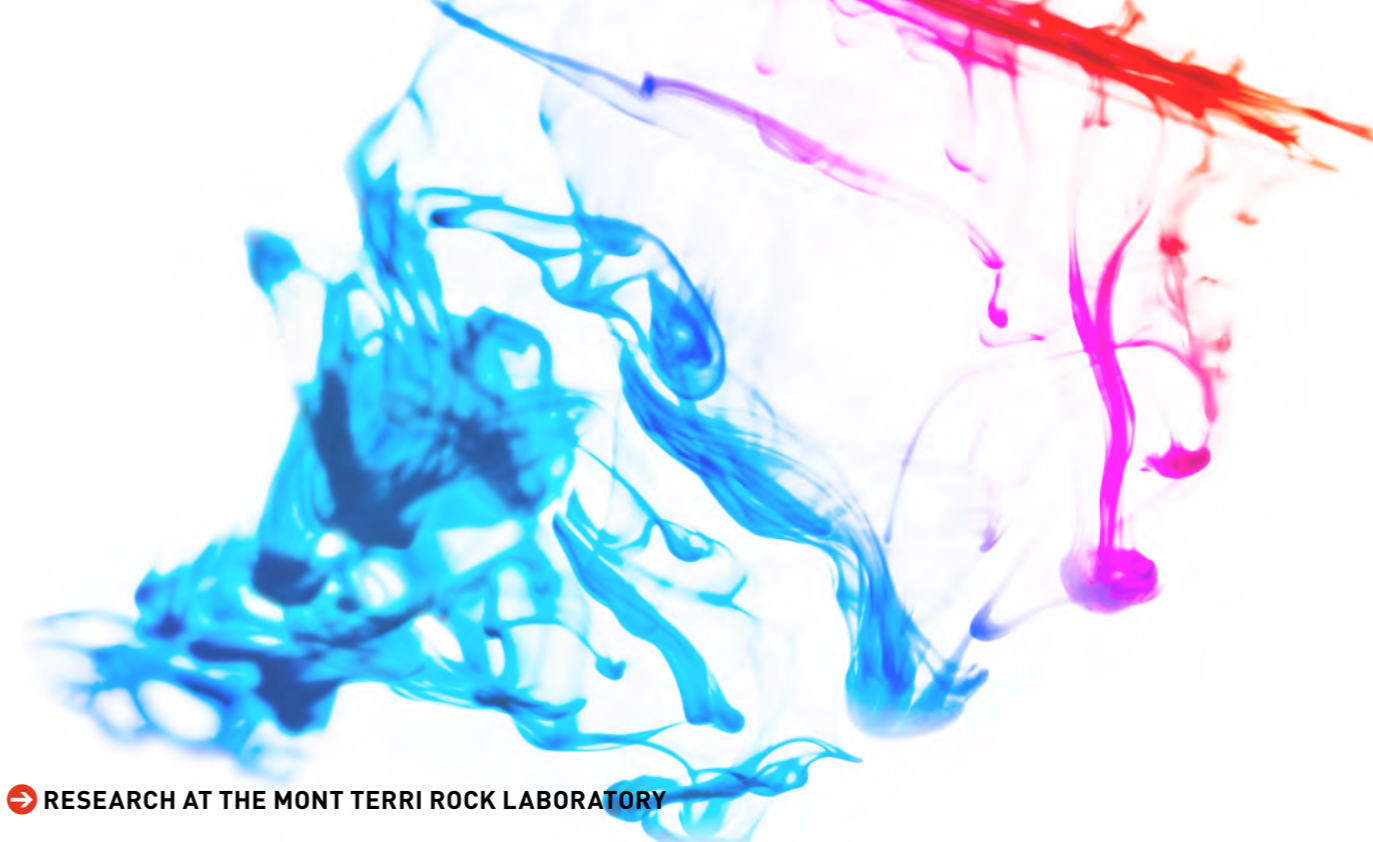


At an extraordinary general meeting, the members of the Nagra Cooperative approved the establishment of two subsidiaries.

Nagra gTL AG will be responsible for the construction and operation of the deep geological repository and Nagra BEVA AG for the construction and operation of the encapsulation plants. Both companies will be wholly owned subsidiaries of Nagra. Their establishment was unanimously approved at an extraordinary general meeting in spring 2024.

The objective is to decouple the management and implementation of the deep geological repository. “This approach is similar to the proven AlpTransit organisational model that was successfully applied to the New Rail Link through the Alps,” explained Nagra CEO Matthias Braun when the two subsidiaries were established. Nothing will change for the partners in terms of collaboration – the deep geological repository for radioactive waste will remain a Nagra project.

The subsidiaries acted as applicants for the general licence applications submitted in November 2024. However, they will not become operationally active for another few years.



➔ **RESEARCH AT THE MONT TERRI ROCK LABORATORY**

What a teabag and a repository have in common

How do radioactive particles move through the damaged Opalinus Clay over time? A long-term experiment is to provide the answer.



A drop of ink or tea from a tea bag: either substance will spread through water. The force behind this phenomenon is called diffusion. The particles keep moving from the area with high concentration to that with low concentration until they are almost evenly distributed. This becomes visible when ink or tea spreads in a glass of water. Diffusion also occurs in the Opalinus Clay in which the radioactive waste is to be enclosed. The radioactive particles – known as radionuclides – move through the Opalinus Clay, albeit very slowly. Diffusion experiments are used to investigate how far, how quickly and in what quantity neutral, positively or negatively charged radionuclides move.

Nagra is currently conducting such an experiment together with five partner organisations – including four from abroad. This long-term test, abbreviated to DR-E, is being carried out in the Mont Terri Rock Laboratory. The experiment was launched in January 2023. First, two vertical holes were drilled into the Opalinus Clay. The geological fault to be investigated was located at a depth of around eight metres, i.e. where the clay rock is fractured and therefore potentially somewhat less tight. A cocktail of radioactive particles consisting of neutral and negatively charged radionuclides has been circulating in the two boreholes since October 2024. The clay binds these less well, which means that it also retains them less well. The cocktail simulates radionuclides

that can be found in radioactive waste. “The experiment will last around three years and the data obtained will be analysed in 2028,” says Nagra project manager Raphael Wüst. In contrast to previous diffusion experiments conducted at the Mont Terri Rock Laboratory, this time, a large-scale natural fault zone in the Opalinus Clay was selected. The main objective is to answer this critical question: how would radionuclides behave if the drifts in the future repository were impacted by an extensive geological fault?

RELEVANT FOR SAFETY

“In three years, the rock affected by the experiment will be removed, and we will analyse how quickly and in what concentration radioactive substances could move in the damaged Opalinus Clay,” says Raphael Wüst.

The new long-term experiment in Mont Terri is relevant with regard to the safety of the repository. Nagra must demonstrate that a repository constructed into the Opalinus Clay will comply with the legal dose limit over a very long period of time. This means that even in the worst-case scenario, only minute quantities of radioactive particles – within the scope that is still harmless to nature and humans – can be released from the repository into the environment. Previous diffusion experiments have shown that this criterion can be met under controlled conditions. At that time, however, the investigation focused on intact sections of Opalinus Clay. The objective of the ongoing experiment, on the other hand, is to more thoroughly investigate the behaviour of radionuclides in larger fault zones.

The radioactive waste issue interests the public. This became apparent in Bern in November 2024, when Nagra submitted the general licence applications for the deep geological repository.

19th November 2024 was not only Nagra's highlight of the past year, but also marked a significant milestone in the entire history of the organisation. It submitted the general licence applications for the deep geological repository and the encapsulation plants – launching a new phase in the project of the century. The priority is to secure the site: the deep geological repository for Switzerland's radioactive waste is to be constructed in Nördlich Lägern. To this end, the applications include outlines of the basic features of the project.

Nagra CEO Matthias Braun told the media in Bern that day: "We are demonstrating that we can construct and operate the deep geological repository safely – even if it will be challenging. With this application, we are laying out the facts needed for Switzerland to decide on the geological disposal of the nation's radioactive waste. A solution is now within reach."

Nagra has been researching this solution for decades. Many employees have invested months or even years in preparing the general licence applications. In this respect, 19th November 2024 was an emotional day for many at Nagra.

RADIOACTIVE WASTE IN THE NATIONAL NEWS

Nagra is aware of the social significance of its project: "The cross-generational project of deep geological disposal needs to be debated as broadly as possible and should be legitimised as a result of a direct democratic process – in Switzerland, this includes an optional national referendum," emphasised Matthias Braun on the occasion of the submission of the general licence applications.

The media response was correspondingly strong: the media conference and the voices of the various participants were featured in numerous TV and radio programmes as well as on news portals and in printed publi-

**Media event on 19th November 2024
on the occasion of the submission
of the general licence applications in Bern.**

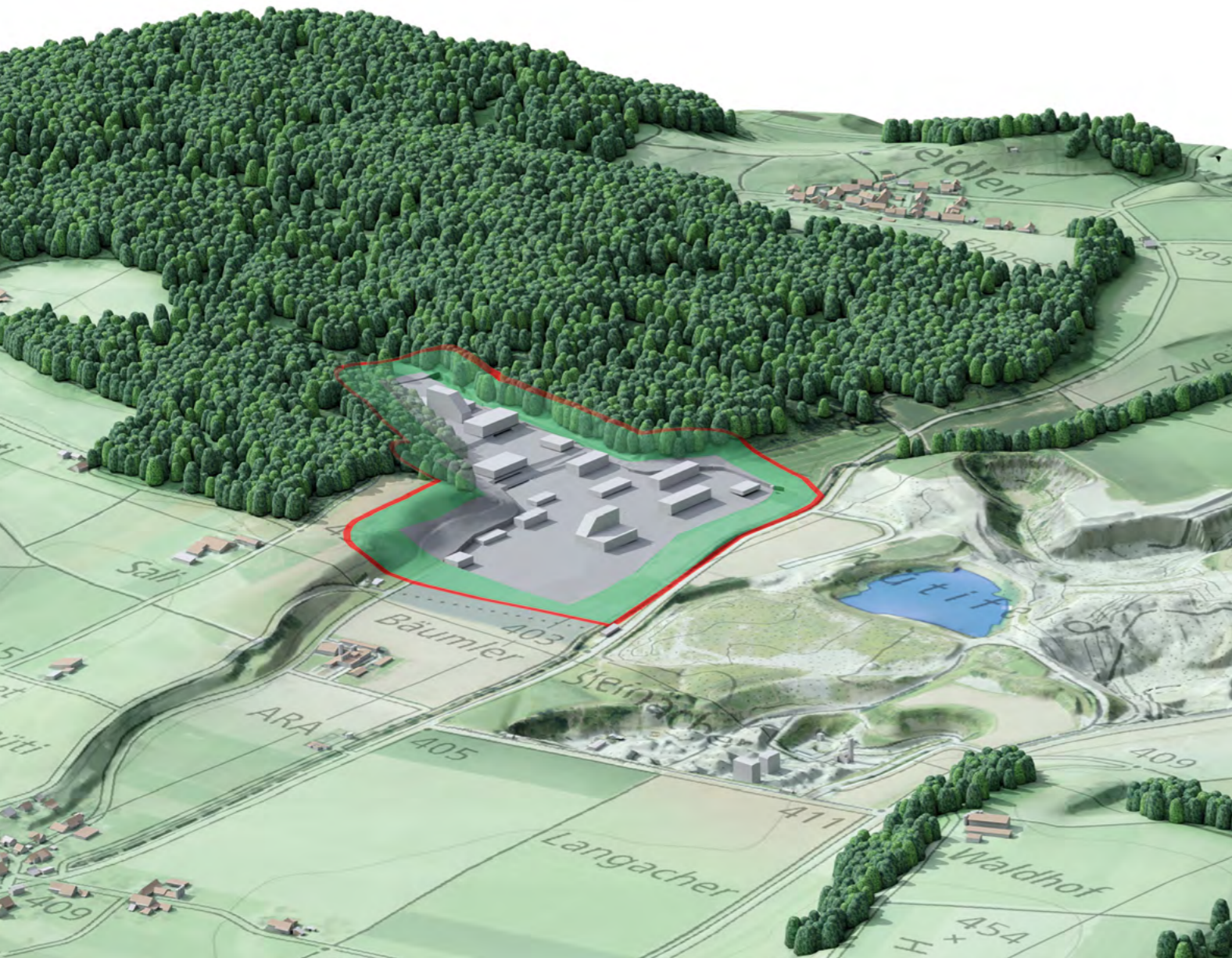


“We’re showing we can build and run the deep geological repository safely – even if it will be challenging.”

cations. On 19th November, the number one news item on the Swiss national news programme, “Tagesschau”, was the submission of the general licence applications. Matthias Braun was a sought-after interview partner and appeared, for example, on the Swiss national radio’s “Tagesgespräch” programme.

There had already been plenty to talk about a few days earlier when a new committee called “Atomares Endlager vors Volk!” (“Let the electorate decide on the repository!”) invited the media to Bern. In the end, the event showed that while the issue of radioactive waste might not be the greatest everyday concern of the average Swiss citizen, many are willing to perk up their ears when related news hits the airwaves. The interest of the nation at large also sends an important signal to the affected region.

Visualisation of the surface facility for the deep geological repository in the Haberstal area near Stadel, Canton Zürich.



“The project needs to be debated as broadly as possible and should be legitimised through a direct democratic process.”

Switzerland’s first nuclear power plant, Beznau 1, was connected to the grid in December 1969. Nagra was founded in 1972. Fifty-two years later and after a few setbacks along the way, the disposal of Switzerland’s radioactive waste has taken a major step forward.

However, the project continues to require the endurance of a marathon runner: the federal authorities are currently reviewing the two applications in detail. The highest priority is the safety of humans and the environment. In addition, Switzerland’s society has to make a fundamental decision. It is up to the Federal Council, Parliament and – should a national referendum be held – the electorate to decide on this.

The close collaboration between the various stakeholders is crucial for the success of this project. In the words of Matthias Braun: “This typically Swiss approach – democratic and thorough – may not be the fastest way to dispose of the nation’s radioactive waste in a deep geological repository. But it makes it all the safer. And we will have achieved our goal by working together.”

As important as the submission of the general licence applications was, we still have work to do. The vision is clear: as soon as Switzerland gives the green light for the deep geological repository, Nagra will be ready to construct it.



JÜRGEN BROMMUNDT

is Deputy Head of Planning and Realisation at Nagra. Born and raised in Braunschweig, Germany, he chose to study civil engineering at the University of Stuttgart. With its relative proximity to the Alps, it was easier to indulge in his favourite hobby, skiing, a passion he is happy to pass on to his two children. Jürgen Brommundt is married and lives with his family in Wettingen.

“CONSTRUCTING A ONE OF A KIND – NOT SOME PROTOTYPE”

Civil engineer Jürgen Brommundt knows that constructing a deep geological repository is more like a marathon than a sprint, ideally, with bold decision-makers setting the pace.

“When I tell my work colleagues that I was involved in major projects in my previous jobs, at best, I will get a laugh out of them. For example, I have modelled entire dams for hydropower projects. These were big projects and required investing two to three years of studies. And yet, what are three measly years compared to our project of the century?

Not every engineer would want to get involved in a project where they would have to wait ten years before the start of the initial construction phase. For me, however, changing jobs five years ago to work for Nagra was exactly the right decision, because I had already been involved in a number of construction projects worldwide and had gained extensive experience. Here at Nagra, the topics are much broader and more in-depth – literally.

My job is to coordinate the planning. I have to organise experts, get things up and running, manage and lead the project. The deep geological repository will be constructed and operated over a period of 100 years and must subsequently function reliably and safely for one million years – to ensure this, we are taking a correspondingly thorough approach. I really enjoy that.

A LOT OF WORK, BUT ALSO PEACE OF MIND

It will be exciting to implement what we have planned. Again, you might wonder: what does an engineer at Nagra put into practice today? The fact is: announcing the siting proposal in 2022 was a kind of test for our team. This was followed by a real highlight: the general licence applications. We contributed nine documents to the general licence applications alone, wrote numerous reference reports and also provided a great deal of support on the side. We could reap the rewards of years of work and create

a coherent overall picture. A high workload always comes with a certain amount of pressure. Earlier, that would probably have made me nervous, but I am calmer now. I know that it will be stressful, but I also know that my team and I can handle it.

What fascinates me is dealing with what we don't know or don't yet know. We cannot and do not yet know exactly where to place each and every tunnel. We have to break the project down into many small parts and steps. This allows us to make partial decisions without losing sight of the big picture. One thing will lead to another, and every decision will take us closer to our goal, the deep geological repository.

“YOU HAVE TO START SOMEWHERE, OR YOU WILL NEVER FINISH”

We have to live with the fact that we will probably never be seen as the good guys – after all, we dispose of radioactive waste. However, what we do is important and meaningful. That is the decisive factor for me.

We must also bear in mind that we are constructing a one of a kind, not some prototype. Few people are specialised in the planning and construction of deep geological repositories. This is why the exchange with colleagues from international waste management organisations is important. Ultimately, however, we at Nagra will have to make our own decisions and stand by them in case our proposals are met with professional and public criticism. For this, we will need courageous women and men who can lead the way. I am happy to say that at Nagra, we have them. They have my greatest respect. You have to start somewhere, or you will never finish – by the time I retire in 2041, I want to have stood in the test area of the deep geological repository.



BIG-HEARTED CHAMPION

Rocco Cipriano describes sport as character-building. His extensive experience in martial arts also helps him at work. But not in the way you might expect.

“**M**y professional background is rather unconventional: I started out as a car mechanic, completed commercial school and switched to an office job, where I worked in customer service and processed warranty claims. However, in that job I missed the flexibility I needed to be able to carry out my regular youth work and training.

Martial arts was, and still is, my all-consuming passion. I have my wife to thank for the fact that I joined Nagra 27 years ago as Head of Site Services. I didn't think I had much chance of getting the job, but she insisted I try. And it was a perfect fit: I met the job requirements because I was familiar with cars and office equipment and I was also able to lead a team. In return, the flexible working hours allowed me to combine my professional and athletic careers. A little anecdote: over these 27 years, I have been using most of my holidays for competitions. When I first became world kickboxing champion in 2003, the then-CEO of Nagra gave me a week's holiday.

DAY-TO-DAY BUSINESS, CARS OR THE COFFEE MACHINE: KEEPING THEM UP AND RUNNING

Together with my team, I am responsible for a wide range of tasks: we take care of the infrastructure and administration of the office building in Wettingen and the drill core archive in Mellingen as well as the entire supply of mobile phones, including administration. Reception and switchboard are also important: my staff welcome and look after our visitors in a professional manner. We work closely with our Safety Officer to ensure occupational health and safety.

I see my main responsibility in ensuring that my team works together in harmony. Much of what we do is taken for granted by others, at least as long as everything runs smoothly. Imagine if that were no

longer the case and something went missing or broke down: let's say a company car or the coffee machine on a Monday morning – that would never do, right?

In a nutshell: we do our job well so that our colleagues can focus on doing their own job well.

GIVING BACK TO OTHERS

For 27 years, I have heard co-workers calling my name almost every time I walk through the corridors: 'Hey Rocco, as you're here...', followed by some request or question. Everyone knows that they can come to me if they need anything. That is alright with me, because I am a person who likes to give back to others. Ergonomics in the workplace is very important when you spend all day in the office. It only takes a few simple adjustments to alleviate or prevent physical complaints. There, too, my athletic experience helps.

I recently started training children with disabilities. It is incredibly fulfilling to see the progress they make and how they come out of their shells. This brings me back to my one true passion, martial arts: I believe that sport is character-building. It helps you to get ahead in life. Whether it was the competitions, my roles as a supervisor, trainer and mental coach or the almost ten years in which I worked with prison inmates every Saturday as a sports instructor in Lenzburg prison – my experiences have shaped me into the person I am today.

”



ROCCO CIPRIANO

is still in top form at the age of 56. He once trained with kickboxing icon Andy Hug before winning six world championship titles of his own. He also won over twenty national titles in different disciplines. He is considered a legend in the Swiss kickboxing scene. Cipriano committed himself to helping and supporting others early on: he trained prison inmates and overweight people, gave self-defence courses for women and instructed children and young people. He has received several awards for his social engagement and his work supporting young people.



VALENTINA ZAMPETTI

studied geology at the Università degli Studi Camerino in Italy. She obtained her doctorate from the Vrije Universiteit of Amsterdam, Netherlands, with an interpretation of carbonate platforms. Before joining Nagra towards the end of 2021, she worked in the oil and gas industry in the Netherlands as well as in Qatar, Scotland and London. She lives in the Netherlands, but will always call Italy her home. At the weekends, she enjoys spending time with her family and friends when she is not travelling the world.

“GEOLOGY REMAINS STABLE, OUR QUESTIONS ABOUT IT CHANGE”

Valentina Zampetti has a particular flair for managing tricky systems and solving challenging tasks. Nagra is the perfect place for the geologist to apply her talents.

“Nagra is an organisation that combines technical excellence with a strong sense of responsibility. I joined Nagra in late 2021 and am proud to contribute to a project that not only advances science, but will also protect our planet for future generations. My career to date has spanned several continents, industrial sectors and disciplines. This global experience has given me a unique perspective that I can bring to this role.

My main task is to determine the geological subsurface. Our objective is to develop an integrated geological model for the repository site in Nördlich Lägern, combining datasets across all disciplines in order to provide as complete and realistic a picture as possible. This is a major technical challenge – and exactly the kind of job I was looking for.

What particularly fascinates me is that, as geologists, our focus usually lies on the past. At Nagra, we use our knowledge to look into the future.

ZOOMING IN ON GEOLOGICAL DETAILS

I see my strength in the fact that I try to solve problems holistically. During my time in the oil and gas industry, my decisions often had a major financial impact. That taught me to combine precision with pragmatism. I know how to reconcile geological aspects with those related to engineering and safety. This interdisciplinary collaboration is key to mastering our complex challenges here at Nagra.

When we submitted the general licence applications on 19th November 2024, I was still running high on adrenaline – we had been working towards this moment for a long time and at maximum capacity. It took a little while for the significance of this day to really sink in. Today – with a little hindsight – I am extremely proud of what we have achieved.

My focus for the general licence applications was on the seismic characterisation. I helped to identify the undisturbed areas of the subsurface that are suitable for the construction of the deep geological repository. For us, 19th November 2024 marked the zenith of our immense scientific efforts. At the same time, our close collaboration for the general licence applications allowed us to evolve as a team sharing a clear vision. This is very important for the future, which will still hold many exciting challenges for us. The construction of the deep geological repository is drawing closer. Geology remains stable over millions of years, but what we want to know about it keeps changing. We must succeed in transitioning from large-scale analyses to a more detailed and project-oriented solution. We want to ensure that we have thoroughly understood every geological detail and can incorporate this knowledge into the decision-making process. This allows us to support our engineers and safety experts in achieving the high standards we are committed to.

SNUGGLING UP WITH A CAT AND A CRIME NOVEL

Outside of Nagra, I lead a full and varied life. My family lives in the Netherlands, which is why I commute to Switzerland every week. At home, I enjoy relaxing with my husband, our thirteen-year-old son and our cat. I like crime novels, conspiracy stories and am interested in the political history of my home country, Italy. I often immerse myself in books and documentaries to explore these fascinating topics. This eagerness to understand intricate systems and narratives also reflects my professional interests: both at work and at home, I delight in piecing together complex puzzles.



NEVER A DULL MOMENT WITH NAGRA

Uschi Züger-Fankhauser has seen Nagra reach numerous important milestones during her career, but she will never forget 19th November 2024.

“**W**hen I think about all the things I have already experienced with Nagra, I am proud of what we achieved on 19th November 2024. Of course, we had already reached several milestones in the past, but actually submitting the general licence applications was on another level. With this, we truly moored our project and were able to do so on time.

Why does this mean so much to me? When I started out at Nagra, we were still considering six potential siting regions for a deep geological repository. Regional participation was in its infancy and schedules were constantly being revised. For this reason, the general licence applications should not be taken for granted. I am proud that I was able to help shape this moment.

3 MONTHS TURNED INTO 15 YEARS

At first, I had no idea what Nagra even did. I had applied for a position that was advertised as a temporary solution for three to six months. Well, that was 15 years ago. I have learned a lot during my time at Nagra – both professionally and personally. I always say that Nagra and I have grown up together.

Assistant is exactly what I want to be. I realised this during my farewell interview at a company before my time at Nagra, where I was told: ‘You’re not a secretary, you’re an assistant. You must continue along this path.’ That is exactly what I did and today, it is clear to me: being an assistant is truly my vocation. I see myself as a central hub from where I coordinate processes and support my team. This includes acting quickly, setting clear priorities

and keeping a cool head in hectic situations. My structured routine helps me to stay calm.

CARING FOR ANIMALS – AND FOR A SAFE FUTURE

2024 was a very challenging year as it was dominated by an intense workload and tight schedules. Together, however, we achieved our objectives. I think it is important that we celebrate our successes – within our team, for example, we celebrated every report we completed for the general licence applications.

I work in Nagra’s most exciting department: we have been carrying out major projects in the field since I first joined. Now, things are getting real and we are working towards a construction licence application. We face new and interesting challenges every day. Changing departments within Nagra has never been an issue for me in all these years, as I never get bored. Animals and the environment are very close to my heart, which is why I take a particular interest in our field investigations. The deep borehole campaign was also very exciting. We are now in a period of change. Embracing it will not always be easy. However, while routine has its advantages, it won’t get us anywhere if we are unwilling to adapt.

I find my job fulfilling because it is meaningful. I am firmly convinced that what we are doing here is extremely important. Nagra is not concerned with short-term profits, but with providing a safe future for many generations to come. That motivates me.

”



USCHI ZÜGER-FANKHAUSER

completed a commercial apprenticeship and then roamed for a few years, as she says herself. She eventually settled down at Nagra – and puts her heart and soul into her job as an assistant. She is very close to her family and likes to spend her free time in the garden, with a book or with her cat.

BOARD OF DIRECTORS

Professor Emeritus Lino Guzzella
President

Roland Schmidiger
Vice President
Axpo Power AG

Dr. Michaël Plaschy
Kernkraftwerk
Gösgen-Däniken AG
until 30th June 2024

Alexander Pührer
Kernkraftwerk
Gösgen-Däniken AG
from 1st July 2024

Dr. Philipp Hänggi
BKW Energie AG

Dr. Thierry Strässle
Swiss Confederation
PSI

Roland Grüter
Kernkraftwerk Leibstadt AG

Dr. Thomas Kohler
Alpiq AG

Matthias Neuenschwander
Neuenschwander
Consulting Engineers SA

Bruno Ulrich
Zwilag Zwischenlager
Würenlingen AG

Members of the Cooperative
Swiss Confederation,
Bern

Alpiq AG,
Olten

Axpo Power AG,
Baden

BKW Energie AG,
Bern

Kernkraftwerk
Gösgen-Däniken AG,
Däniken

Kernkraftwerk Leibstadt AG,
Leibstadt

Zwilag Zwischenlager
Würenlingen AG,
Würenlingen

Technical Commission
Dr. Thomas Kohler
Chairman
Alpiq AG

Finance Commission
Urs Helfer
Chairman
Axpo Power AG

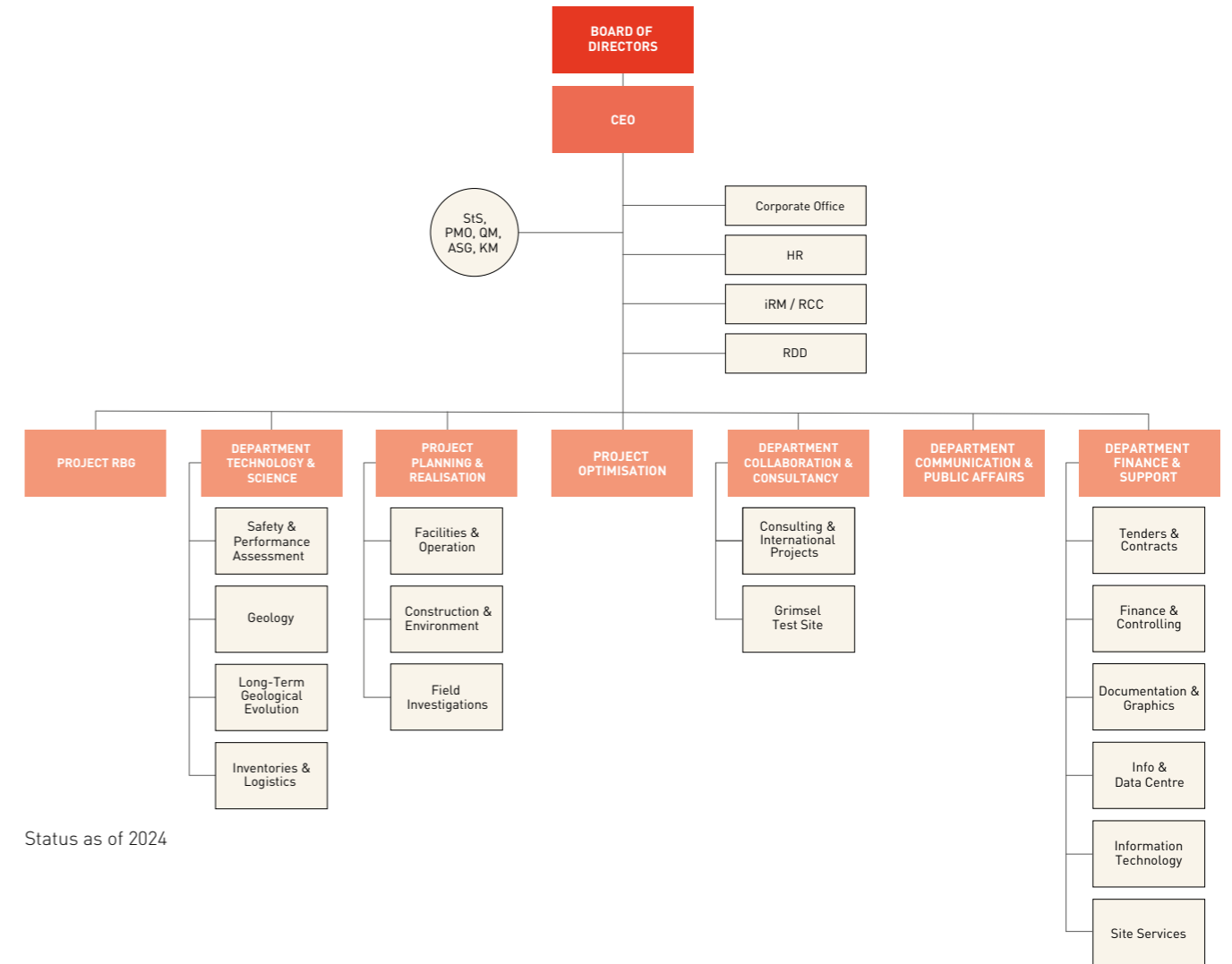
Commission for Communication
Dr. Thierry Strässle
Chairman
Swiss Confederation

Commission for Legal Affairs
Rolf Baumgartner
Chairman
Axpo Holding AG

Nomination and Compensation Committee
Lino Guzzella
Professor Emeritus
Chairman

Statutory Auditor
Hüsser Gmür + Partner AG,
Baden-Dättwil

ORGANIGRAM OF THE HEAD OFFICE



Status as of 2024

- CEO Chief Executive Officer
- HR Human Resources
- iRM integrated Risk Management
- KM Knowledge Management
- OHS Occupational Health & Safety
- PMO Project Management Office
- QM Quality Management
- RBG General Licence Applications
- RCC Requirements, Configuration and Change
- RDD Research, Development and Demonstration
- RP Radiation Protection

EXECUTIVE BOARD



Matthias Braun
CEO



Reto Beutler
HEAD FINANCE & SUPPORT



Irina Gaus
HEAD PROJECT
OPTIMISATION



Severin Wälchli
HEAD PLANNING &
REALISATION



Tiina Jalonen
HEAD DIGITAL PROJECT
AND DATA
(from 1st January 2025)



Maurus Alig
HEAD PROJECT RBG /
DEPUTY CEO



Philipp Senn
HEAD COMMUNICATION &
PUBLIC AFFAIRS



Tim Vietor
HEAD TECHNOLOGY &
SCIENCE



Ingo Blechschmidt
HEAD APPLIED GEOSCIENCE &
INTERNATIONAL
COLLABORATION
(from 1st January 2025)



Jan Konstanty
CHIEF COMMERCIAL
OFFICER
(from 1st January 2025)

ANNUAL FINANCIAL STATEMENTS 2024

COMMENTS ON THE ANNUAL FINANCIAL STATEMENTS 2024

While operating revenues were slightly lower at CHF 57.4 million (previous year CHF 61.7 million), Nagra succeeded in reaching another important milestone: the year 2024 was dedicated to completing the documentation for the general licence applications for the deep geological repository and the encapsulation plant for spent fuel assemblies. These applications were submitted to the authorities on time on 19th November 2024.

In the reporting year, Nagra also established two subsidiaries, which were entered in the commercial register of Canton Aargau on 17th June 2024. Nagra gTL AG and Nagra BEVA AG will be responsible for the planning, construction and operation of the deep geological repository and the encapsulation plant for spent fuel assemblies, respectively.

The current financial statements for 2024 were prepared in line with the provisions of the relevant Swiss legislation, in particular the articles on commercial accounting and financial reporting of the Code of Obligations for individual financial statements (Art. 957 to 962).

Total expenditure minus proceeds from sales of goods and services and other income is borne by the members of the Cooperative, which results in a balanced year-end result.

Further information can be found in the notes on the annual financial statements.

Wettingen, 20th March 2025



Dr. Matthias Braun, CEO

INCOME STATEMENT

Note	1.1.-31.12.2024	1.1.-31.12.2023
	CHF	CHF
C1		
Net proceeds from sales of goods and services		
Net proceeds from services for third parties	3 140 461	3 495 794
Research contributions from third parties	–	231 339
Net proceeds from services for Cooperative members	33 785	70 790
Total net proceeds from sales of goods and services	3 174 246	3 797 923
C2		
Contributions of members of the Cooperative		
Contributions to administration costs	700 000	700 000
Contributions to project expenditure	53 513 323	57 080 034
Total contributions of members of the Cooperative	54 213 323	57 780 034
Other operating income	54 850	149 698
Total operating income	57 442 418	61 727 655
C3		
Cost of materials (project expenditure)	30 173 773	34 855 372
C4		
Staff costs	23 406 659	21 861 767
C5		
Other operating costs	3 192 357	3 497 841
C11		
Depreciation and value adjustments on fixed assets	317 205	191 521
Operating result	352 425	1 321 155
Financial income	–55 256	–74 905
Financial costs	45 573	31 974
Ordinary result	362 108	1 364 087
C6		
Extraordinary, non-recurring or prior-period expenditure	234 201	1 248 081
Annual profit before taxes	127 907	116 006
Direct taxes	127 907	116 006
Annual result	–	–

BALANCE SHEET

Note	Assets	31.12.2024	31.12.2023
		CHF	CHF
	Current assets		
	Cash and cash equivalents	11 600 573	18 169 554
	Trade receivables	1 610 003	1 134 017
	Due from third parties	505 221	150 200
	Due from members of the Cooperative	1 104 782	983 817
C7	Other short-term receivables	1 476 037	217 118
	Due from third parties	1 476 037	217 118
C8	Non-invoiced services	2 510 791	2 346 341
C9	Accrued income and prepaid expenses	30 217	194 311
	Total current assets	17 227 620	22 061 342
	Capital assets		
C10	Subsidiaries	2 000 000	–
C11	Tangible fixed assets	2 083 660	1 907 559
	Total capital assets	4 083 660	1 907 559
	Total assets	21 311 280	23 968 901
	Equity and liabilities		
	Short-term liabilities		
C12	Trade payables	–	7 494 953
	Due to third parties	–	7 343 781
	Due to members of the Cooperative	–	151 172
	Other short-term liabilities	691 724	1 425 586
	Due to third parties	691 724	1 425 586
C13	Advance payments received	7 518 300	6 782 137
C14	Deferred income and accrued expenses	12 961 256	8 126 225
	Total short-term liabilities	21 171 280	23 828 901
	Long-term liabilities	–	–
	Total liabilities	21 171 280	23 828 901
C15	Equity		
	Cooperative capital	140 000	140 000
	Annual result	–	–
	Total equity	140 000	140 000
	Total equity and liabilities	21 311 280	23 968 901

CASH FLOW STATEMENT

Note		1.1.–31.12.2024	1.1.–31.12.2023
		CHF	CHF
	Annual result	–	–
C11	Depreciation and value adjustments on fixed asset items	317 205	191 521
	Change in net current assets		
	Decrease (+) / increase (–) trade receivables	–475 985	2 377 732
C7	Decrease (+) / increase (–) other short-term receivables	–1 258 919	–134 901
C8	Decrease (+) / increase (–) non-invoiced services	–164 450	–527 856
C9	Decrease (+) / increase (–) prepaid expenses	164 094	8 761 537
C12	Decrease (–) / increase (+) trade payables	–7 494 953	2 606 203
	Decrease (–) / increase (+) other short-term liabilities	–733 863	–173 456
C13	Decrease (–) / increase (+) advance payments received	736 163	1 476 548
C14	Decrease (–) / increase (+) deferred income and accrued expenses	4 835 032	1 716 035
	Cash flow from operating activities	–4 075 675	16 293 363
C10	Investments in subsidiaries	–2 000 000	–
C11	Investments in fixed assets	–493 306	–710 468
	Cash flow from investment activities	–2 493 306	–710 468
	Cash flow from financing activities	–	–
	Change in cash and cash equivalents	–6 568 981	15 582 895
	Change in cash and cash equivalents	2024	2023
	Cash and cash equivalents as of 1st January	18 169 554	2 586 659
	Cash and cash equivalents as of 31st December	11 600 573	18 169 554
	Net increase/decrease in cash and cash equivalents	–6 568 981	15 582 895

NOTES ON THE ANNUAL FINANCIAL STATEMENTS

A) General information

Accounting legislation

The current financial statements were prepared in line with the provisions of Swiss law, in particular the articles on commercial accounting and financial reporting of the Code of Obligations for individual financial statements (Articles 957 to 962).

Company, name, legal form and registered office

Nagra, National Cooperative for the Disposal of Radioactive Waste
Hardstrasse 73, Postfach, 5430 Wettingen, Switzerland

Type of audit

According to legal requirements (Art. 727 Par. 1 Item 2 of the Code of Obligations), the annual financial statements of Nagra are subject to an ordinary audit.

Currency used for the accounting

The accounting is in the national currency (Swiss Francs, CHF).

Cash flow statement

The cash and cash equivalents form the basis for the presentation of the cash flow statement. Cash flow from operating activities is calculated using the indirect method.

Approval of the annual financial statements

The Board of Directors approved the annual financial statements on 20th March 2025 on behalf of the annual general meeting.

B) Information on the principles applied in the annual financial statements

The main positions in the annual financial statements are assessed as follows:

Cash and cash equivalents

Cash and cash equivalents comprise petty cash and credit balances on bank accounts. They are carried at nominal value. Foreign currency positions are carried at the exchange rate on the reporting date.

Trade receivables

Trade receivables are reported at the invoiced amount minus allowance made for the bad debts provision. Allowance is formed based on the maturity structure and recognisable credit risks.

Receivables and payables towards involved parties

These positions are exclusively receivables and payables towards involved parties (i.e. the members of the Cooperative).

Non-invoiced services

The capitalised work in progress and the received advance payments result exclusively from contracts for third parties. For the ongoing projects, all expenditure is capitalised as work in progress, and all advance payments received are booked as a liability.

Fixed assets

Fixed assets are reported at acquisition cost minus the accumulated depreciation over the estimated useful lifetime of each asset category. Investments in hardware below CHFk 20 and software below CHFk 100 are debited directly to the income statement.

The lifetimes for depreciation fall within the following bandwidths for the individual categories that are relevant for Nagra:

Land	Depreciation only in the case of value impairment
Buildings	20 to 50 years
Operating and business equipment	5 to 10 years
IT (hard- and software)	2 to 3 years

Expenditure on repairs and maintenance that does not add value is debited directly to the income statement. Renewals that change the useful lifetime of assets are capitalised.

Assets removed from operation or sold are written off on the assets account at their acquisition values and the accumulated depreciation. The resulting profits or losses are entered in the income statement.

Payables

All payables are carried at nominal value. Services received and incurred liabilities are deferred according to the period.

Provisions

Provisions are formed when, based on events that have occurred in the past, the company has a legal or factual obligation, the extent and due date of which are unknown but can be estimated.

C) Information, breakdowns and notes on the annual financial statements

C1) Net proceeds from sales of goods and services

Net proceeds from sales of goods and services decreased in the reporting year, but there is a high order backlog for future work.

C2) Contributions of the members of the Cooperative

The contributions of the members of the Cooperative are invoiced on a monthly basis according to the budget approved by the Board of Directors. A deviation from the budget leads to an additional charge or a credit that is booked in the year of accounting as prepaid expenses or deferred income. This has an annual result of CHF 0.

The 2024 accounting year resulted in an income surplus of CHF 5.2 million (2023: CHF 4.1 million), which will be returned to the members of the Cooperative.

C3) Cost of materials (project expenditure)

The project expenditure is made up as follows:

External services for:	2024	2023	2022
	CHFk	CHFk	CHFk
Projects: – scientific basis, studies, work related to the L/ILW and HLW programmes – deep borehole campaign	17 584 736	20 713 3 814	21 484 17 958
Communication	1 397	1 424	2 158
Fees (ENSI, SFOE, others)	9 978	8 312	9 062
Travel expenses	478	592	572
Project-related external services	30 174	34 855	51 234

C4) Staff costs

Staff costs, including social contributions, rose by 7% as a result of capacity expansion.

The average staffing level in 2024 was 124.5 full-time positions and 4.3 temporary positions (2023: 118.9 full-time positions and 4.2 temporary positions).

C5) Other operating costs

Other operating costs include rents and expenditure on property of CHF 1.4 million, expenditure on information technology of CHF 0.9 million and further operating costs of CHF 0.9 million.

C6) Extraordinary, non-recurring or prior-period expenditure

Nagra lodged an appeal with the Federal Administrative Court against the ruling on the VAT revision in 2021, which had resulted in an additional claim from the tax authorities. The court ruled in favour of Nagra in early 2025, but this decision is not yet legally binding. In the interest of commercial prudence and as done in 2023, the potentially additional tax claim of CHF 0.2 million for 2024 was therefore booked as extraordinary expenditure.

C7) Other short-term receivables

A purchase agreement for the property at the site of the planned deep geological repository was concluded in the reporting year. Ownership will be transferred in 2025, which is why advance payments made to date are shown under short-term receivables. This item also includes guarantee and cash contributions.

C8) Non-invoiced services

Non-invoiced services consist of accrued internal services and third-party services for various projects. Verification is provided on a project-specific basis.

C9) Accrued income and prepaid expenses

Accrued income and pre-paid expenses mainly include an advance payment for an international association of waste management organisations.

C10) Investments in subsidiaries

In the reporting year, Nagra established two subsidiaries, which were entered in the commercial register of Canton Aargau on 17th June 2024. Nagra gTL AG and Nagra BEVA AG will be responsible for the planning, construction and operation of the deep geological repository and the encapsulation plant for spent fuel assemblies, respectively. The two subsidiaries were provided with share capital of CHF 1 million each. Nagra holds 100% of the capital and 100% of the voting rights. The first, extended financial year of the non-operational subsidiaries was set to end 31st December 2025, which is why they were not consolidated in the reporting year.

C11) Tangible fixed assets

	Land and buildings	Office and workshop	Vehicles	Total
	CHFk	CHFk	CHFk	CHFk
Acquisition value as per 01.01.2023	1 858	754	759	3 372
Additions	645	13	54	712
Disposals			-3	-3
Reclassifications				
Acquisition value as per 31.12.2023	2 503	767	810	4 081
Additions		457	36	493
Disposals		-12		-12
Acquisition value as per 31.12.2024	2 503	1 212	846	4 561
Accumulated depreciations as per 01.01.2023	618	739	626	1 983
Additions	105	13	75	193
Disposals			-3	-3
Accumulated depreciations as per 31.12.2023	723	752	698	2 173
Additions	104	155	57	316
Disposals		-12		-12
Accumulated depreciations as per 31.12.2024	827	895	755	2 477
Carrying value as per 01.01.2023	1 240	16	133	1 389
Carrying value as per 31.12.2023	1 780	15	113	1 908
Carrying value as per 31.12.2024	1 676	317	91	2 084

C12) Trade payables and other short-term liabilities

A new enterprise resource planning (ERP) system was introduced on 1st January 2025. To ensure a smooth transition in accounting terms, all outstanding trade payables were paid at the end of 2024 (CHF 2.181 million). In addition, December invoices to the amount of CHF 2.733 million were deferred in 2024 and not booked as trade payables.

As with other short-term liabilities, invoices for social insurance totalling CHF 0.453 million were deferred and not booked as other liabilities.

Without the ERP changeover, a total of CHF 3.186 million would have been booked as higher liabilities (and correspondingly lower deferred income) and CHF 2.181 million as higher liabilities (and correspondingly higher cash and cash equivalents).

C13) Advance payments received

Advance payments received are for accrued internal services and third-party services for various projects. Verification is provided on a project-specific basis. Due to the higher volume of third-party contracts, the advance payments received as per 31st December 2024 rose by CHF 0.7 million to CHF 7.5 million.

C14) Deferred income and accrued expenses

The 2024 accounting year resulted in an income surplus of CHF 5.2 million, which will be returned to the members of the Cooperative and has therefore been booked as deferred income and accrued expenses. A further significant amount of deferred income consists of outstanding settlements for services rendered. This includes the effect of the ERP system changeover, which totalled CHF 3.186 million (cf. C12). Other important items include the fees (ENSI, SFOE) and remuneration for work performed

by the University of Bern and the Paul Scherrer Institute. The deferral for the head office amounts to CHF 1.3 million. CHF 0.23 million were deferred for the potentially additional VAT claim. The deferral for outstanding vacation time and overtime amounts to CHF 1.9 million.

C15) Equity

The Cooperative capital is unchanged with CHF 140k and is divided into 140 share certificates of CHF 1 000 each, with 7 certificates of 20 shares each being distributed.

D) Further information

Liabilities towards pension schemes

As of 31st December, there were the following liabilities towards pension schemes:	31.12.2024	31.12.2023
	CHF	CHF
Contribution statement December	294 588	272 965

Contingent liabilities

Nagra is not involved in any legal actions, legal disputes, regulatory or tax investigations, inquiries or other legal procedures that could have financial consequences for the annual financial statements for 2024.

As of 31st December 2024, there were no guarantee obligations.

Risk report 2024

The Board of Directors regularly analyses the organisation's risk situation to direct the organisation's risk exposure in a targeted manner and, where necessary, decide on suitable measures. The corresponding processes have been established. The main business risks are systematically identified and assessed and documented in a report dated 28th June 2024.

Remuneration disclosure of the Statutory Auditor

(in accordance with Article 961a of the Code of Obligations)

The Statutory Auditor claimed the following remuneration:

	2024	2023
	CHF	CHF
Audit of the annual financial statements	16 000	16 000
Additional audits	12 500	2 500
Total	28 500	18 500

[excluding expenses and VAT]

Developments after the balance sheet date

Nagra lodged an appeal with the Federal Administrative Court against the ruling on the VAT revision in 2021, which resulted in an additional claim of CHF 0.9 million from the tax authorities. The court ruled in favour of Nagra at the beginning of 2025, but this decision is not yet legally binding. In the interest of commercial prudence and as done in 2023, the potentially additional tax claim of CHF 0.2 million for 2024 was therefore booked as extraordinary expenditure.

ACCUMULATED ACCOUNTS

Note	Total income	Excluding interest:		As per 31.12.2023 CHF	Excluding interest:		As per 31.12.2024 CHF
		Increase 2023 CHF	adjustment payments 2023 CHF		Increase 2024 CHF	adjustment payments 2024 CHF	
	Swiss Confederation	5 473 262	–	165 118 366	5 325 844	–	170 444 209
	Axpo Power AG	11 966 474	–	390 953 366	11 173 484	–	402 126 850
	BKW Energie AG	6 160 314	–	186 851 951	5 797 904	–	192 649 854
	Kernkraftwerk Gösgen-Däniken AG	14 443 948	–	501 070 549	13 427 542	–	514 498 091
	Kernkraftwerk Leibstadt AG	19 036 036	–	605 600 470	17 788 549	–	623 389 019
	Contributions to project expenditure	57 080 034	–	1 849 594 700	53 513 323	–	1 903 108 023
	Contributions to administration costs	700 000	–	94 470 000	700 000	–	95 170 000
	Contributions of Cooperative members to Nagra	57 780 034	–	1 944 064 700	54 213 323	–	1 998 278 023
	Contributions GNW	–	–	65 265 331	–	–	65 265 331
E1	Total contributions	57 780 034	–	2 009 330 031	54 213 323	–	2 063 543 354

NOTES ON THE ACCUMULATED ACCOUNTS

Note	Total expenditure	Increase	As per	Increase	As per
		2023	31.12.2023	2024	31.12.2024
		CHF	CHF	CHF	CHF
	Geoscientific studies	6 177 724	289 517 262	5 682 768	295 200 030
	Nuclear technology and safety	3 410 899	67 513 492	1 901 576	69 415 069
	Radioactive materials	1 641 670	56 129 640	953 002	57 082 642
	Facility planning	2 250 062	44 630 497	1 657 403	46 287 899
	Generic (site-independent) work	2 305 452	130 222 810	1 384 995	131 607 805
	General programme costs	4 940 448	128 759 305	7 628 538	136 387 844
	Fees and compensation	4 155 854	96 773 987	5 014 687	101 788 674
	L/ILW programme	24 882 109	813 546 993	24 222 969	837 769 962
	Geoscientific studies	9 796 595	553 497 917	7 412 220	560 910 137
	Nuclear technology and safety	4 469 467	99 298 625	2 327 692	101 626 316
	Radioactive materials	1 325 131	37 571 571	1 020 307	38 591 878
	Facility planning	3 682 242	44 609 218	2 662 270	47 271 488
	Generic (site-independent) work	3 220 077	152 839 132	2 479 211	155 318 342
	General programme costs	5 548 559	115 001 788	8 495 770	123 497 558
	Fees and compensation	4 155 854	98 494 786	4 892 886	103 387 672
	HLW programme	32 197 925	1 101 313 038	29 290 354	1 130 603 392
E2	Project expenditure for repository programmes	57 080 034	1 914 860 031	53 513 323	1 968 373 354
	Administration and general project expenditure	700 000	94 470 000	700 000	95 170 000
	Total expenditure for L/ILW and HLW programmes, administration and general project expenditure	57 780 034	2 009 330 031	54 213 323	2 063 543 354

The accumulated treatment of the contributions of the members of the Cooperative and the application of these contributions form the basis, at the time of waste disposal, for any adjustments of payments among the members. It also indicates which work has resulted in project-related expenditure.

The structure of the total income is oriented primarily to the operating accounts.

E1) Contributions of the members of the Cooperative

The contributions of the members of the Cooperative towards covering project costs are calculated based on the thermal output, the service-lifetime-weighted output and the expected waste volumes of the individual nuclear power plants of the members.

The contributions of the members in the total amount of CHF 54.2 million (2023: CHF 57.8 million) correspond to those in the income statement. A contribution of CHF 0.7 million to administration costs is included.

In the 2024 financial year (as in 2023), no compensation payments were made among the members of the Cooperative.

Contributions of the "Cooperative for Nuclear Waste Management Wellenberg" (GNW) include payments by GNW for contract work on the Wellenberg project. This project is terminated.

E2) Project-specific expenditure for the repository programmes

The two repository programmes (L/ILW and HLW) essentially have the same structure in the presentation of the accumulated accounts and are oriented towards the most important technical tasks to be performed up to the completion of waste disposal activities. If there is no explicit reference to a specific programme, the following explanations of the individual positions apply to both projects.

a) Geoscientific investigations

Geological investigations for identifying potential siting regions comprise geological studies in the investigation area of Northern Switzerland for the deep geological disposal of high-level waste, as well as the processing of geological information for the disposal of low- and intermediate-level waste.

b) Nuclear technology and safety

The work comprises the safety-based evaluation of potential siting regions as well as laboratory studies on the near-field and on the different backfill materials.

c) Radioactive materials

This includes expenditure on assessing the disposability of waste packages and on ongoing documentation and inventorying of radioactive waste.

REPORT OF THE STATUTORY AUDITOR

d) Facility planning

This position includes expenditure on developing the concepts for the surface and underground facilities for the repositories for HLW and L/ILW.

e) Generic (site-independent) work

This includes work on developing methodologies, modelling and validation of the models used in safety analyses, laboratory studies, participation in the work in the research laboratories (Grimsel and Mont Terri) and the research programmes of the EU.

f) General programme costs

This expenditure results from programme management, expenditure on cost studies and from public affairs activities.

g) Fees and compensation

This includes the fees passed on to Nagra from the regulatory and safety authorities.

Report of the Statutory Auditor to the general meeting of Nagra, National Cooperative for the Disposal of Radioactive Waste

Wettingen

Report on the audit of the annual financial statements for 2024

Audit opinion

We have audited the annual financial statements of Nagra, National Cooperative for the Disposal of Radioactive Waste (the Cooperative), which comprise the income statement, balance sheet as of 31st December 2024 and the cash flow statement for the year then ended, as well as the notes on the annual financial statements, including a summary of significant accounting policies.

In our opinion, the attached annual financial statements comply with Swiss law and the Cooperative's articles of incorporation.

Basis for the audit opinion

We conducted our final audit in accordance with Swiss law and Swiss Auditing Standards (SA-CH). Our responsibilities according to these legal provisions and standards are described in more detail in the section "Responsibilities of the statutory auditor when auditing the annual financial statements" of our report. In accordance with Swiss law and the requirements of the auditing profession, we are independent of the Cooperative and have fulfilled our other professional duties in compliance with these requirements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Other information

The Board of Directors is responsible for the other information. The other information comprises the information included in the annual report, but does not include the financial statements and our auditor's report thereon.

Our opinion on the financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the annual financial statement or our knowledge obtained during the audit, or otherwise appears to be materially misstated.

If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Responsibilities of the Board of Directors for the annual financial statements

In accordance with the requirements of Swiss law and the Cooperative's articles of incorporation, the Board of Directors is responsible for the preparation of the annual financial statements and for such internal control as the Board deems necessary to enable the preparation of annual financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the annual financial statements, the Board of Directors is responsible for assessing the ability of the Cooperative to continue business operations. Further responsibilities include disclosing, as applicable, matters related to continuing business operations, and applying the accounting policy of continued business operations unless the Board of Directors either intends to liquidate the Cooperative or to cease operations, or has no realistic alternative but to do so.

Responsibilities of the statutory auditor when auditing annual financial statements

Our objectives are to obtain reasonable assurance that the annual financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue a report that includes our audit opinion. Reasonable assurance provides a high level of assurance, but it is not a guarantee that an audit conducted in accordance with Swiss law and Swiss Auditing Standards will always detect potential material misstatements. Misstatements can result from fraud or error and are considered material if, individually or as a whole, they could reasonably be expected to influence the economic decisions of users taken on the basis of these annual financial statements.

A more detailed description of our responsibilities for the audit of the annual financial statements can be found on the EXPERTsuisse website: <http://expertsuisse.ch/wirtschaftspruefung-revisionsbericht> (in German). This description forms part of our report.

Report on other legal requirements

In accordance with Article 906 CO in connection with Article 728a Par. 1 Item 3 CO and Swiss Auditing Standard PS-CH 890, we confirm the existence of an internal control system designed for the preparation of annual financial statements according to the instructions of the Board of Directors.

We also confirm that the register of the members of the Cooperative is kept in compliance with Swiss law and the Cooperative's articles of incorporation. We recommend that the financial statements submitted to you be approved.

Hüsser Gmür + Partner AG



Jonas Schwegler
Audit expert
Auditor in charge



Mathias Dietrich
Audit expert

Baden-Dättwil, 20th March 2025

APPENDICES

WASTE INVENTORIES AND VOLUMES

Radioactive waste arises mainly from electricity production in the Swiss nuclear power plants. It is also produced from the use of radioactive materials in the areas of medicine, industry and research (MIR waste).

Waste volumes at the end of 2024

Nagra maintains a centralised database of all waste packages as a service to the waste producers. The following table shows the volumes and activities of waste prepared for deep geological disposal as of the end of 2024. The Zwiilag waste consists of waste packages delivered to the interim storage facility from the nuclear power plants, waste packages from the plasma furnace and steel flasks with vitrified high-level waste from reprocessing.

Conditioned waste (31st December 2024, figures rounded)	Volume (m ³)	Activity (Bq)
Nuclear power plants	2 824	9.3 · 10 ¹⁴
Zwiilag interim storage facility	3 551	6.4 · 10 ¹⁸
Swiss Federal Interim Storage Facility (MIR) (waste from medicine, industry and research)	1 775	1.3 · 10 ¹⁶

The table does not include raw waste and preconditioned waste packages that are foreseen to undergo further treatment in the interim storage facility.

Predicted waste volumes and inventories for deep geological disposal

Planning the deep geological repository requires information on expected waste volumes. The total volume of waste for disposal will be around 93 000 cubic metres packaged in disposal containers (see table for details). The volume of waste from the nuclear power plants (NPPs) and Zwiilag results from the given operating lifetimes; the volume of waste from medicine, industry and research is based on the end of operation of the L/ILW* repository.

Predicted waste volumes (47- /60-year NPP operation) ¹	L/ILW* (m ³)		ATW* (m ³)		HLW* (m ³)	
	conditioned	packaged	conditioned	packaged	conditioned	packaged
Operational waste from the NPPs (from cleaning systems and mixed waste), incl. post-operational phase	10 994	36 657				
NPP reactor waste (activated components)	404	1 629				
NPP decommissioning waste	21 449	28 645	25	25		
NPP reprocessing waste			99	433	115	377
MIR waste	9 506	15 119	165	607	3	22
Surface facility waste Waste from the future surface facilities for the L/ILW & HLW repositories	219	727				
Spent fuel assemblies					1 433	8 895
Total volumes	42 572	82 776	288	1 065	1 550	9 295
Percentage (rounded)	95.9%	88.9%	0.6%	1.1%	3.5%	10.0%

¹ Basis: Model Inventory of Radioactive Materials for the general licence applications (MIRAM-RBG)
Operating lifetimes: Mühleberg NPP 47 years (till 2019), Beznau, Gösgen and Leibstadt NPPs 60 years
Takes into account a decay storage period of radioactive materials for a maximum of 30 years with subsequent conventional disposal.

* L/ILW = low- and intermediate-level waste; ATW = alpha-toxic waste; HLW = high-level waste

Picture credits

Cover photo: Florian Kober
Photo: Nagra

Pages 2–6: Matthias Braun and Lino Guzzella
Photos: Nagra

Page 7: Visualisation of the surface facility of the deep geological repository
Graphic: Nagra

Page 9: Map of deep geological repository and encapsulation plant
Graphic: Nagra

Pages 10–12: Impressions of the 40th anniversary of the Grimsel Test Site
Photos: Nagra

Page 13: Jürg Neidhardt and Alain Bourgeois in front of 3D visualisation
Photo: Nagra

Page 14: Establishment of Nagra subsidiaries
Photo: Nagra

Page 15: Visualisations of diffusion
Photo: istockphoto.com

Pages 17 and 19: Media conference on the occasion of the submission
of the general licence applications in Bern
Photos: Nagra

Page 18: Visualisation of the surface facility at Haberstal
Graphic: Nagra

Page 20 Jürgen Brommundt
Photo: Nagra

Page 23: Rocco Cipriano
Photo: Nagra

Page 24: Valentina Zampetti
Photo: Nagra

Page 27: Uschi Züger-Fankhauser
Photo: Nagra

Pages 30–31: Nagra Executive Board
Photos: Nagra



**Nagra | National Cooperative
for the Disposal of Radioactive Waste**

Hardstrasse 73 | 5430 Wettingen | Switzerland
T. +41 56 437 11 11 | info@nagra.ch | nagra.ch

