

The background of the entire page is a photograph of a woman with a joyful expression, wearing a headwrap and holding a large quantity of bright red berries in her hands. The scene is set outdoors under a clear blue sky, with a tree trunk visible on the left side.

# Sustainability Report 2021

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UN Global Compact  
Communication on Progress 2021

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## Sustainability Report 2021

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# Financial highlights

**2,521**

Revenue in DKK million

**132**

EBITA in DKK million

**6.9%**

EBITA margin

**6.5%**

Own production organic growth

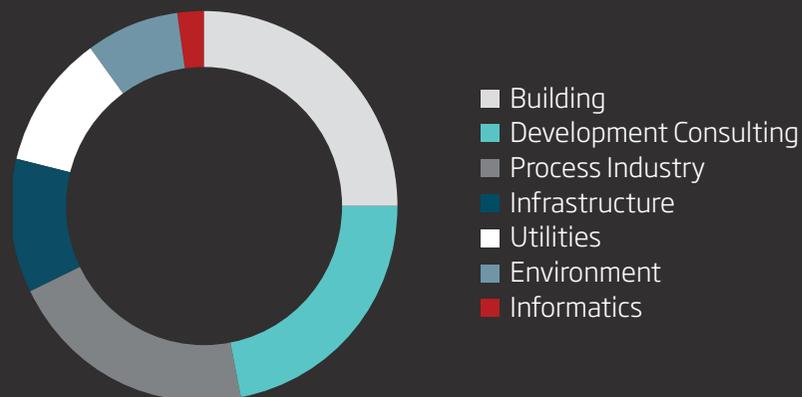
**12.9%**

Own production total growth

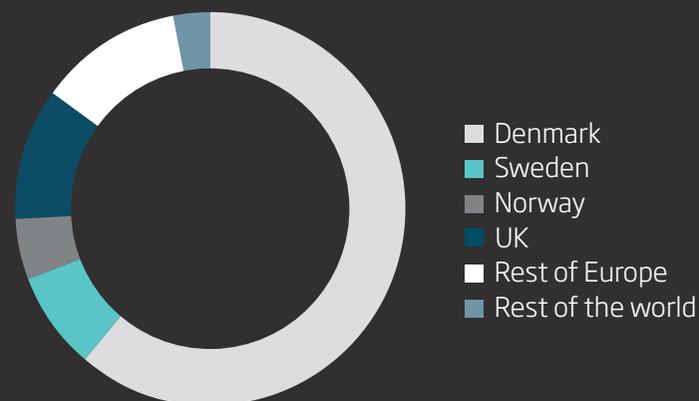
**2,306**

Employees

**Gross revenue sector**



**Gross revenue country**



# CEO statement of continued support

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## Our people and business

What impresses me most when looking back at 2021 is our amazing staff, our proven organisational resilience and our ability to maintain commitment and dedication during the second year of COVID. We have maintained a strong focus on clients and projects and at the same time shown due care for each other and been able to go the extra mile. Social interactions and having fun together have been in short supply and is so much needed now. As an organisation we have drawn on our social capital, but we have nevertheless managed to keep up our good spirits and our collaborative culture. This makes me both proud and humble at the same time and not least very thankful to every single employee - You are NIRAS. During 2021 we have also welcomed an increasing number of employees becoming shareholders of NIRAS and thus consolidating our identity as a Trust & Employee owned company.

Despite COVID most of our markets remained strong. However, our development consulting services have suffered from severe instability and crises first in Myanmar, then Ethiopia and in the beginning of 2022 also in Ukraine. Safety of our employees is of course top priority and in close cooperation with our clients and with support from our embassies we have taken the necessary actions to relocate people, change scope or ultimately terminate assignments and close subsidiaries.

Despite those difficulties even this service line has managed to grow during 2021.

Business wise 2021 was a very good year for NIRAS. We managed to create significant organic growth and maintained profits at a satisfying level. Furthermore we delivered solid progress on our strategic objectives and concluded an important acquisition. Both revenue and own-production came out at high levels of DKK 2.5 and 1.9 billion respectively. Our growth in own-production was 12.9 % - organic growth (6.5 %) and (6.4 %) from our acquisition of the Danish pharma consultancy, Alfa Nordic. The strong team of consultants from Alfa Nordic doubled our size in the pharma sector and significantly expanded our capabilities and expertise. Organic growth is an important strategic objective for NIRAS and the 6.5 % matched our growth target for 2021. Organic growth was delivered across most sectors.

Profits at EBITA level reached DKK 132 million equaling 6.9 % of own-production compared to 6.8 % in 2020. Building, Process Industry and Norway contributed significantly to the strong financial result whereas the Swedish market and parts of the Danish infrastructure market were more challenged.

## Sustainability

Sustainability continues to be the keyword of our mission statement.

NIRAS's pledge is to become carbon neutral in scope 1 and 2 before 2030 and actively use our procurement policy to reduce our scope 3 impact. Being a consultancy our by far most important opportunity to drive sustainable progress is through our clients' investment projects. Our activities within the business areas development consulting, environment and utilities, together covering 41 % of our net revenue, originate from and are still driven by the sustainability agenda. The 2015 decision to globally pursue the 17 UN sustainability goals is creating strong momentum and commitment to the need for sustainable development across all our sectors. In close cooperation with key-clients and partners we are investing in developing sustainable solutions aimed at improving sustainability across our sectors.

Within pharma and not least the food & beverage sector, more sustainable production and products are rapidly becoming the key success factor. Consumers demand sustainable products and businesses are committed accordingly. Particularly strong examples from NIRAS's portfolio are the new innocent production plant in Rotterdam to be commissioned early 2022, where sustainability was the no. 1 design criterion, the AB InBev decision to benchmark all production sites according to performance on selected sustainability goals and Novo Nordisk's decision to make certified environmental targets mandatory in their full

supply chain. Furthermore, we see brand like Oatly going from niche to mainstream and the investments in the development of plant-based products are booming.

In the construction and real estate industry the development towards more sustainable solutions is in particular driven by the investors and increasingly also by the large infrastructure owners. In close cooperation with clients and partners we have developed expertise and delivered solutions aiming at focusing, quantifying and documenting the sustainability impacts and not least the effect of mitigating actions related to investments and projects.

The transformation to sustainable energy supply has really gained momentum in Denmark during 2021 and we are proud to be entrusted with the environmental screening of the Danish North Sea energy island and to be the technical design partner of a strong European team of contractors well positioned for the construction task.

For several years, NIRAS has been signatory to UN Global Compact, the principles of Safeguarding Human Rights and Duty of Care, Discrimination, Environment, and Compliance. We pledge our full continued commitment to UN Global Compact and its ten principles in order to achieve the accomplishment of UN's Sustainable Development Goals.



Photo: Keen Heick-Abildhauge

### Digitalisation

We invest substantially in digital innovation and digital service delivery. Our guiding objectives are continuous improvements of quality and cost effectiveness.

Our approach is to stay open and curious to technology and generously support and invest in new ideas in partnerships with clients, universities and other partners. During 2021 we have invested in 23 digital innovations across our sectors and developed in-house centers of excellence within key technologies such as IoT, AI, Robotics and drones. The overall results so far are promising – our solutions work and are creating value in our service delivery and some of them are scalable and even have the potential to be genuine digital business models.

Two examples are within rule checking and permitting where AI and RPA based solutions have proven to be both efficient and reliable in reducing errors, improving quality and significantly increasing productivity of authorities, consultants and contractors.

Our majority owner, The NIRAS ALECTIA Trust has generously supported Ph.D. students for years, not least within digitalisation and sustainability. In 2021 the scope of activity was expanded with a large grant dedicated to the creation of the NIRAS Green Tech Hub offering space, advice and a dynamic environment for start-ups within digitalisation and sustainability. Start-ups are screened carefully and offered access to NIRAS's expertise and clients are offered access to the new solutions.

### Projects and partnerships

NIRAS's value creation is delivered through projects – projects are how we organise the development of tailor made solutions to realise our clients' visions or solve their problems. We are passionate about projects and organise our people, processes and systems to support our project delivery process in the best possible way. During 2021 project management was at the core of our talent development program and we decided to expand the ISO certification of our QA-system in NIRAS. Multidisciplinary project delivery across offices and nationalities is becoming increasingly important in order to best serve our clients' needs. Many of our large scale infrastructure projects in Norway are delivered in close cooperation across NIRAS offices in Scandinavia including Oslo, Stavanger, Gothenburg and Allerød. Besides ensuring proper project delivery, the cooperation also provides sharing of knowledge and best practice across Scandinavia and builds networks between our staff.

NIRAS believes in partnerships in order to ensure that our clients receive the best available solutions and expertise. Our drinking water purification and cloudburst tunnel projects in Copenhagen designed for HOFOR are strong examples of teaming up with international partners.

### Prospects for 2022

The horrifying situation in Ukraine creates uncertainty and is likely to have a negative impact on growth. This may imply elements of economic downturn especially in our more cyclic sectors such as building and process industry. Climate change adaptation and mitigation are however likely to remain high on the agenda and drive increased investments in transformation of the energy sector away from fossil fuels and protection of land and property from rising sea level and cloud bursts.

Transforming the energy sector is likely to become one of the largest societal investments over the years to come and in NIRAS we have decided to double our strategic market- and expertise development budget in order to make NIRAS an even more skilled and attractive partner in the transformation.

We look forward to 2022 and the years to come and NIRAS will do its best to support the transition of society to sustainability and stay relevant for our clients.



Carsten Toft Boesen

# Highlights from 2021 delivering our strategy

NIRAS is a value-driven, multi-disciplinary engineering consultancy fundamentally committed to sustainable progress and service delivery. NIRAS's business areas include building, energy, water, environment, infrastructure, offshore wind, ports & marine, food & beverage, life science, urban planning, and development consulting.

In Denmark, NIRAS is a market leader in the majority of our business areas, and we have strong niche markets in Northern Europe and Asia-Pacific. We believe that collaboration, creativity, and sharing knowledge, will help create the most value for our clients. NIRAS's strong, professional environments give our clients access to interdisciplinary services and a profound level of expertise.

To NIRAS, it is crucial for us to develop a close and trusting relationship with our customers as we help them realise their sustainable potential. In everything we do, we strive to create value for our customers and have a positive impact on society through sustainable progress and technologies.

NIRAS Fundamentals include our business ecosystem as well as the foundation of the way we work based on our values: Listen, Learn and Deliver.

NIRAS employs highly skilled professionals, and we strive to create a dynamic, professional, and challenging working environment that pays special attention to the work-life balance.

Our core values tie us together across national borders, sectors and professional expertise. Our unique trademark is an inter-disciplinary and innovative approach to projects, and we take pride in transforming clients' visions and challenges and facilitating sustainable progress.

We place a high value on education. In 2021, we invested 2.3% of total staff cost in training. We also developed and completed a new Scandinavian graduate program and invested in a special education fund. Our Trust also funds 6 Ph.Ds.



**2021 was the first year of our 3-year strategy in which we place a focus on excellence in project delivery as well as organic growth.**

Our strategy has four focus areas:



**We aspire for excellence in project delivery across disciplines**

Our Net promoter score went from 60 in 2020 to

**72** in 2021.

In 2021, we continued to highlight the importance of expectation management, a concept that was also the focus of our talent programme. Our Infrastructure business earned ISO 9001 certification, and QA and risk management continue to be critical factors across the organisation.



**Digital innovation**

We have invested in developing four Centres of Excellence and several Ph.D's, and a large number of digital projects were launched in 2021. Digital innovation is integrated in all business strategies and is the focus of further investment in 2022.



**We are on a joint venture for sustainable progress of society**

We continue to share knowledge across the organisation, building more internal networks to deliver signature projects during the year. Cooperation with universities, including a Ph.D. on sustainability, and our work to position ourselves on the SDG Agenda have been our focus in 2021.



**Organic growth**

**6.5%**  
organic growth without compromising profitability

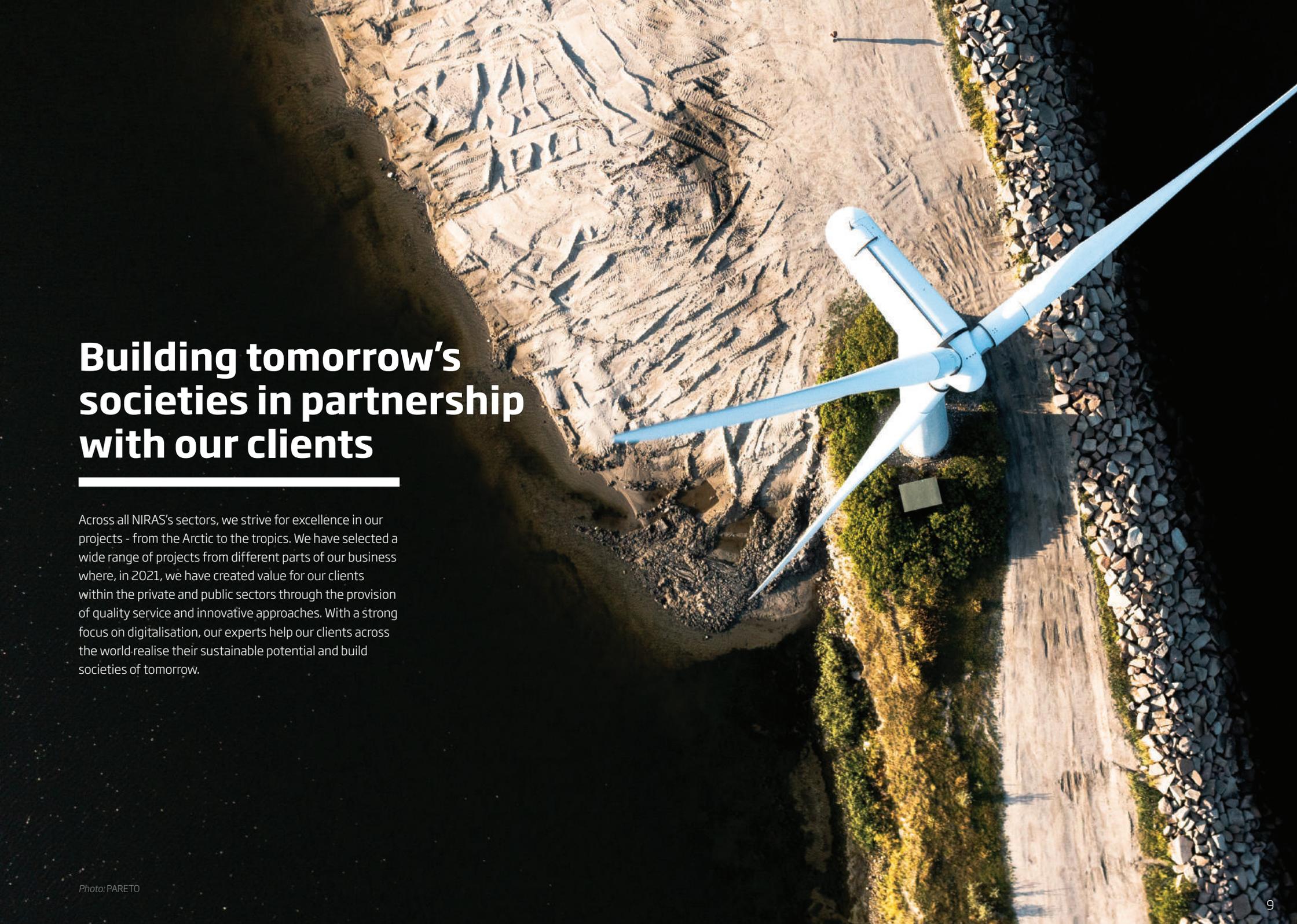
# NIRAS's global presence

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NIRAS employs around 2,300 professionals working on more than 7,000 projects globally. NIRAS operates in a number of countries through branches and our experts work in more than 120 countries.

We have our main presence and home markets in Denmark, Norway, Sweden, Finland, the United Kingdom, The Netherlands and Germany, but we also have branches in countries across Europe, Africa, the Asia-Pacific region and in the Americas.



An aerial photograph of a white wind turbine in a coastal landscape. The turbine is positioned on a sandy area next to a rocky shoreline. The background shows a body of water and a large, textured rock formation. The lighting is bright, suggesting a sunny day.

# Building tomorrow's societies in partnership with our clients

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Across all NIRAS's sectors, we strive for excellence in our projects - from the Arctic to the tropics. We have selected a wide range of projects from different parts of our business where, in 2021, we have created value for our clients within the private and public sectors through the provision of quality service and innovative approaches. With a strong focus on digitalisation, our experts help our clients across the world realise their sustainable potential and build societies of tomorrow.

# Building

## As a building consultant, NIRAS delivers a wide range of solutions for public and private clients

In NIRAS we develop future constructions for the benefit of people, the environment, and society. We work across a broad range of disciplines where we deliver sustainable solutions to our clients involving end users to ensure optimal solutions. We have established strong, international partner networks, which enable us to deliver industry-leading expertise to our projects and follow our international clients across borders.



**"The real estate and construction industries are currently experiencing a historically good period.**

**But it is also in a time that requires - and is characterised by - development and innovation. For us, a high level of professionalism is the foundation of our work, and competent project and process management create the framework for a good project. Furthermore, ensuring sustainability is the biggest societal obligation we have."**

- Mads Søndergaard, Executive Vice President, Building

## High levels of professionalism

In 2021, we continue to invest substantially in professional development. The goal is to maintain our strong competence and ensure this is translated into 'buildability' in the projects. We work closely with Danish universities, where a large number of our talented employees teach and participate in research projects. One of the industry's challenges is to ensure that the certification schemes within fire - structural engineering are adapted and implemented for the benefit of the projects. We take this obligation very seriously and we host two of the largest divisions in Denmark within fire consulting and structural engineering.

## PROJECT

Large financial and pension companies get a dynamic shared office in Copenhagen

### **A large financial company, Nykredit, and a large pension fund, AP Pension, are moving into new headquarters in the North Harbour of Copenhagen.**

The construction of the groundbreaking headquarters is based on a new way of thinking about workplaces combined with a strong responsibility towards society.

The ambition of our client, AP Pension, is to build a sustainable office that holds certifications in both architecture and construction. This, for example, sets out requirements for the contractor on the handling of construction waste and also consideration of the urban environment and interaction with the local community. NIRAS has been responsible for all the engineering disciplines.



### Better collaboration

Our approach puts “the project in the centre”, and thereby we bring each other’s competencies into play rather than the interests of the individual companies and actors. It also means that we often partner up with foreign peer companies. To ensure good collaboration based on trust, transparency, and commitment throughout the whole project, we focus on early involvement of parties, i.e. contractors and suppliers.

### PROJECT

New large multi-purpose hall breaks out of the prison’s old walls

**The new multi-purpose hall will have a floor removed to get enough height to slide a box with a large multi-purpose space into the building. It requires calculations to manufacture and set up the large steel structures to replace the load-bearing walls.**

The box is designed using modern materials contributing to an original and open expression. The special form of collaboration with integrated construction engages the contractor early in the process, for the client, consultant, contractor and architect to work closely together from the beginning. NIRAS is consulting the client on this project.



### Sustainability in our construction projects

During 2021, we have been involved in several projects with a strong focus on sustainability. In addition to having sustainability certified more than 100 buildings, we have worked in areas ranging from measuring embedded CO<sub>2</sub> in building materials and social sustainability in residential buildings to recycling building materials.

Working with sustainability requires knowledge, industry insight, and a holistic approach from all actors.

### PROJECT

The world’s first circular kindergarten

**A Danish municipality has sanitised and demolished a school to build a new eco-labelled kindergarten built with recycled materials from the old school.**

The new kindergarten is the world’s first to be constructed using circular economy principles. It is built with as many materials as possible from the old school. In order to demolish and build sustainably, you need to focus on the amount of waste, limiting CO<sub>2</sub> emissions, the use of new materials, and minimising the use of chemicals and environmentally problematic substances in building materials.

Recycling and reusing building materials is the main principle of circular building. NIRAS is a consultant and engineer on this project.

# Data & Digitalisation

Digital development is advancing rapidly. It affects all of our clients, services, and business models as well as the competitive landscape, and is furthermore one of the most crucial elements in the green transition. These conditions are enough to focus on digitalisation and therefore also the reason why it is highly prioritised in our business strategy.

At NIRAS, we help our clients to gather and visualise data in a useful way and apply technology and digital tools to develop new solutions.

Digitalisation enables us to handle ever more complex challenges for the benefit of society and our clients. We have specialists within data science, visualisation, GIS, BIM, software development, machine learning, the internet of things (IoT) and automation. We combine digital competences with our professional expertise within the sectors of infrastructure, supply and building, where we create unique solutions for the benefit of our clients and society.



**"NIRAS Digital Strategy is a framework strategy, that focuses on connecting and reinforcing digital innovation initiatives, as well as professional networks, across the organisation. Thus it does not focus on a single digital technology, but rather creates the framework for identifying centers of excellence within eg. BIM, Reality Capture, Robot Process Automation etc. The aim is to encourage the business to engage with their customers, through fast and direct funding of digital innovation projects. The aim is also to develop more efficient ways of working through eg. automation, but also to try and build new services based on different future business models."**

- Stig Brinck, Expertise Director, ICT and process development
- Christian Holmegaard Møssing, Vice President, Data, Analytics and Planning
- Claus Birkholm, CIO

Our digital taskforce in NIRAS



Ørstedsparken  
Photo: olli0915

**Ph.D. PROJECT**

Tools that support financial inclusion

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**As part of a Business Ph.D., NIRAS has developed a tool that supports financial inclusion in developing countries.**

The technology is based on combining free satellite data corresponding with free data from Google Open Street maps, thereby creating a model for how cities are developing demographically in emerging markets. Based on the model, one can estimate population density, standard of living based on building types, access to electricity based on night lights among other things. Financial institutions use the model to plan the expansion of financial services to meet the needs of growing populations.

**PROJECT**

Digital processes in condition assessment of green areas for the Copenhagen municipality

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**During three months over the summer, NIRAS has had two teams around the municipality's parks, cemeteries and green areas to assess the condition of urban furniture and green elements. Up to 10,000 litter bins and benches, a very large number of green areas and three kilometers of hedges, fences and walls in ten districts were assessed. In total, more than 25,000 locations were visited from May to the end of July.**

The data collection and processing were implemented as integrated digital processes from the field records on mobile phones and tablets to the models for calculating the cost of recovery and ongoing maintenance. All reports to the database took place in real time, which made it possible to follow the daily progress, both geographically and in the number of registrations that were continuously matched with the target numbers. The goal was that it should be both representative of the individual element types and representative geographically of the ten districts.

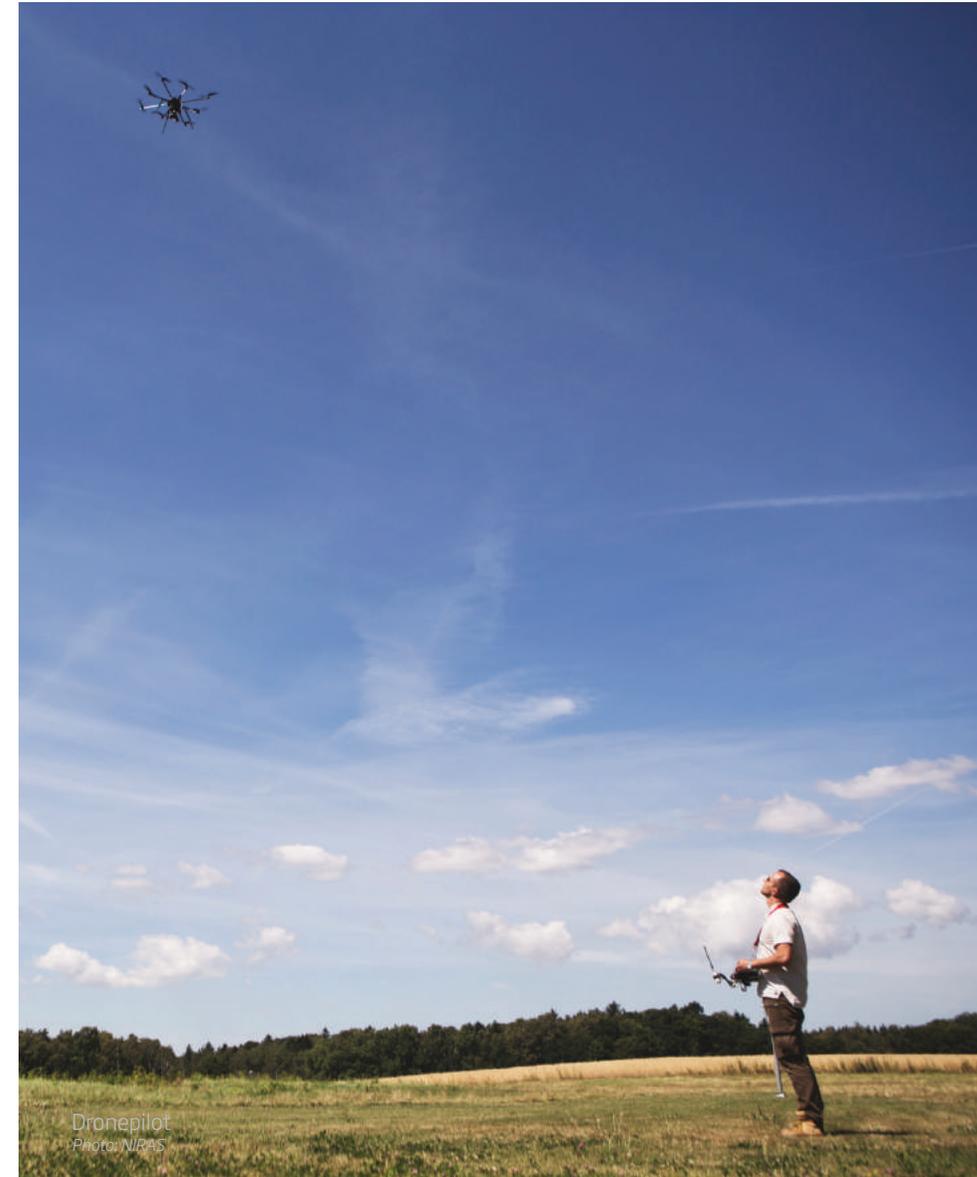
**NEWS**

NIRAS gets approval to fly drones and test fully autonomous models

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**At the end of 2021, NIRAS received approval to fly drones in accordance with the new EU drone rules and is today one of the only operators allowed to fly in the specific category.**

This means among other things that we can operate with relatively heavy drones in e.g. urban settlements, which opens up a very wide use of drones. 2021 was also the year when NIRAS was one of the first companies in Denmark to test fully autonomous drones that navigate solely by modelling what the drones register using artificial intelligence.



Dronepilot  
Photo: NIRAS

## **At NIRAS, we create sustainable solutions for a better, more equal and stable world**

Working across a broad spectrum of areas - such as energy, water, education, employment promotion, and rural and economic development, to name just a few - we deliver tailored, innovative, value-creating and results-driven solutions to enable our clients and partners achieve their goals.

### **PROJECT**

Building alliances between the public, civil and private sectors to promote youth employment

**A partnership project between the governments of Serbia and Switzerland, the Education to Employment (E2E) project aims to provide decent job prospects for all young women and men in Serbia regardless of their social status.**

At the national level, E2E supports the evidence-based development of youth employment policies, while at the local level it facilitates practical employment and learning opportunities to increase youth employability and create a dynamic, modern and adaptive labour market in Serbia.

The project provides work-based learning (WBL) of labour market skills required by companies. In order to better match private sector needs with the labour supply, E2E cooperates with six local partners - mediators and bridge-builders between training providers, companies and youth - who facilitate the training programmes and offer career guidance and matching services for both young people and companies.



**"Reflecting and looking back at 2021, we are extremely proud of the transformative change our experts have delivered in collaboration with partners and clients in close to 400 development cooperation projects around the globe. And yet it has also been a year characterised by unpredictability and some turmoil. The military coup in Myanmar and the security situation in Ethiopia are just two examples that highlight the importance of the work we continue to do in the field of international development, building a safer and more just world in line with the SDGs".**

- Markus Davelid, Executive Vice President, Development Consulting



"Education to Employment" project, Milan Aksentijević

Photo: olli0815



Photo: NIRAS

### PROJECT

Enhancing innovation networks and facilitating cross-border collaboration in Southern Africa

**The Southern African Innovation Support (SAIS) programme contributes to the growth of new businesses through strengthened innovation ecosystems and sharing of good practice among role-players in innovation in the SADC region.**

Combatting poverty in the SADC region requires investment in science and technology as well as improved management of the resources required to bring new or improved products, processes, and services to the market. SAIS is contributing to this process in five countries across the region by specifically focusing on national and regional innovation systems supporting early-stage entrepreneurs. The SAIS Innovation (Challenge) Fund has assisted 26 trans-national projects through matching grants (€50,000-280,000 grant value depending on the project) and offered bespoke training on business planning and investment readiness.

The projects have engaged more than 80 innovation support organisations from 12 countries in validation of new instruments such as accelerators or incubators that, in turn, have assisted more than 2,000 African startups and entrepreneurs to gain new skills, access to finance or a foothold in new markets. In four years, SAIS cross-border innovation competition “BoostUp” has engaged more than 1,000 startups from four countries to learn the art of pitching and improve their product/service offering and business plan.

### PROJECT

Land registration: the foundation of sustainable development in Ethiopia

**Most of the people in Ethiopia’s rural areas depend on agriculture in some way to survive. For them, the land is the most important asset. It is the main source of livelihood, but also social status and political power are connected to the land.**

The Finnish-funded Responsible and Innovative Land Administration of Ethiopia (REILA) created a method to register farmers’ land rights so land can be used

as collateral for loans. The method has been adopted as the national method. REILA has registered over 1 million parcels of land, and other projects that have also applied the REILA method comprise more than 14 million parcels. This means land for over 20 million people. As a result of successful public awareness, today there are more female landholders than male.

Another success of the REILA project has been the creation of the National Land Administration Information System (NRLAIS), which includes all 15 million parcels. NRLAIS processes all changes to the land registry, such as inheritance.

## NIRAS plans and designs energy systems and implements renewable energy on a local, regional and national level

We provide advisory services for renewable energy solutions in all the phases of a project – including feasibility studies, environmental impact assessments and strategic environmental assessments, technical design, project management, procurement and supervision of construction sites. We help companies, utilities and municipalities to map and reduce their emission of CO<sub>2</sub> and other greenhouse gasses.

### PROJECT

Carbon Capture – City of Copenhagen

**Copenhagen has an ambition to become the first carbon neutral capital in 2025. In connection with the City of Copenhagen's involvement in the Carbon Neutral Cities Alliance under the C40 network of cities with climate ambitions, NIRAS has carried out a project to contribute to their ambition and the green energy transition.**

The project consists of a technology catalogue for capture, transport, long-term storage and recovery of CO<sub>2</sub>. It is presented so that it is suitable for non-technical stakeholders.



City of Copenhagen, Denmark by night

Photo: Jimmy Paillet

The catalogue provides a brief introduction to the technologies and should serve as a tool for large cities to be able to work with Carbon Capture to reduce cities' CO<sub>2</sub> emissions.

### PROJECT

Wastewater supplies heat to approximately 3,550 households in Roskilde

**A sector-coupling project in the city of Roskilde utilises heat in wastewater for district heating production. This is possible with a new heat pump system, which is a benefit for the environment as well as heating prices.**

Wastewater is a multi-resource, from which biogas, agricultural fertiliser and district heating can be produced. Most of the year wastewater is warmer than both seawater and air. Consequently, it is a valuable source of heat. The wastewater treatment plant Bjergmarken in Roskilde has invested in a new heat pump system that can produce district heating.

After the installation, approx. 64,000 MWh/year is now delivered from the utilisation of heat in wastewater. This corresponds to the annual heating needs of approximately 3,550 households.

The new facility was commissioned in March 2021 with NIRAS as advisor all the way from start to finish.



**“The world faces an imminent need to implement the technologies of the future in energy sectors across the globe. Carbon reductions, capture, storage and utilisation are focal points in the transition to renewable energy sources. At NIRAS, we contribute with expert knowledge in strategic partnerships - partnerships which I believe to be vital drivers for the successful green transition, as urgently needed as ever.”**

- Jens Brandt Bering, Senior Vice President, Utilities

## PROJECT

District heating company is looking for a collaboration on power-to-X

**In collaboration with the district heating company Fjernvarme Fyn, NIRAS has investigated the possibility to capture and utilise CO<sub>2</sub>.**

For the district heating company Fjernvarme Fyn, NIRAS has carried out an analysis of the possibilities to capture CO<sub>2</sub> and utilise it in a PtX plant. The feasibility studies also included initial explorations about which partners could be relevant in relation to constructing a power-to-X-plant in connection with the district heating plant in Odense.

The analysis includes assumptions, market analysis, framework conditions, constraints and technologies with a focus on interaction with the district heating – so-called sector coupling. The conclusion shows a promising business case for Fjernvarme Fyn in the form of both environmental and economic gains – partly from limiting emitted CO<sub>2</sub> and partly from utilisation of surplus heat as well as the contribution to a potential partner's production of fuels or other secondary products.



# Environment & Ecology

## **NIRAS is a leading environmental consultancy delivering high quality and innovative services**

We help protect the environment inside - in private homes, public buildings and companies - as well as outside - in cities, the nature, on land or in water. We have a deep understanding of environmental legislation.

We work with our clients to understand environmental risks, potential impacts and management requirements and ensure that they are compliant with relevant legislation, regulations and best practice.



**"We have witnessed a large increase in the demand for our competencies in all types of environmental assessments. We are frontrunners in sustainable solutions and passionate about nature, the environment and the green transition. We conduct several environmental studies and assessments, for instance the Energy Island in the North Sea, to ensure the least possible impact on the environment, we design recycling facilities for ships and offshore structures and we carry out pollution investigations of PFOS. Our mission is to ensure sustainable development for our clients and society in general."**

- Tom Heron, Senior Vice President, Environment



A couple of Minke Whales

Photo: atese

### PROJECT

Energy Island in the North Sea

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**Energinet has chosen NIRAS to undertake strategic environmental assessments (SEA) as well as environmental studies of the proposed Energy Island and surrounding offshore wind farms in the North Sea.**

Energy Island will be the largest renewable energy project in Denmark and the North Sea to date. The island will get a 3 gigawatt offshore wind farm, with the option for a subsequent expansion to 10 gigawatts.

The preparation of the SEA is primarily based on existing data and information about environmental conditions, including wildlife. Between now and 2024, NIRAS will undertake surveys and analysis of data for marine mammals, fish populations, and avifauna during different times of the year in the area where the proposed Energy Island and offshore wind farm will be located.

### PROJECT

Environmental impact assessment of the masterplan for Tangkrogen

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**A comprehensive plan for Tangkrogen near Aarhus will solve challenges in treating wastewater, expanding Marselisborg Marina and updating traffic and parking conditions.**

NIRAS is conducting an environmental assessment of two equivalent alternatives to wastewater treatment plants and marinas. We are also preparing environmental assessments of a new bay pipe, sewage pipes for the new treatment plant and demolition of the existing treatment plants.

We are preparing the project descriptions in close collaboration with the building consultants, their associated consultants and the planning and environmental authorities. The final report will be an environmental impact report.

### PROJECT

Success with innovation and handling of new challenges within the PFOS area

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NIRAS has prepared a report with the results from pollution investigations at the fire school and the area around the school in Korsør. It is a thorough investigation, which, among other things, includes 29 drillings at the fire school, 24 soil tests in the allotment and a series of samples in the ditch. The samples were analysed for both oily substances and 12 PFAS compounds, of which PFOS is one. NIRAS has previously worked within the PFOS area in Sweden, which has given us a good starting point to be at the forefront of the area.

# Food & Beverage

## **NIRAS consults on investment, project execution and production optimisation at manufacturing facilities in the Food & Beverage industry**

We have a deep knowledge of our clients' products and processes. We can transform visions and challenges into sustainable solutions - from the very first idea until the fully operational plant. We focus on best practice, innovation and sustainable solutions which secure our clients the best results and operational reliability.



**"Sustainability has become a license to operate in the Food & Beverage industry. In the coming year, we will witness an increased demand for sustainable products such as plant-based foods and drinks and related fermentation. We will also see a rising demand for more sustainable production methods regarding CO<sub>2</sub> emissions, optimal use of resources and utilities such as water, and increased use and recycling of waste products. At NIRAS, our experts are positioned at the forefront of this sustainable revolution of the Food & Beverage industry."**

- Thomas B. Olsen, Senior Vice President, Process Industry



The NIRAS-owned British company Integrated Food Projects is helping innocent to create a \$250 million carbon-neutral manufacturing factory in Rotterdam.

*Photo: Innocent*

### **PROJECT**

The earth's most sustainable healthy drinks factory in Rotterdam

### **NIRAS has laid the foundations for innocent's new carbon-neutral manufacturing facility.**

Manufacturing has started with the first bottled drinks rolling off the production line at 'the blender' in the port of Rotterdam. The earth's most sustainable healthy drinks factory, the blender will produce up to 300 million litres a year.

To meet any further energy needs, the blender will operate its own solar panels and wind turbines. Road miles will be reduced by 20% as a significant proportion of raw materials will arrive by sea in Rotterdam.

**PROJECT**

**New Oatly plant-based factory**

**NIRAS is building one of the world’s largest plant-based factories for the original Swedish oat drink company - Oatly.**

The new factory is located in Peterborough in UK and has the capacity to produce an anticipated 450 million litres of oat drink per year. This output will help ensure that plant-based dairy becomes accessible to more consumers, helping them to reduce their own impact on the environment.

Oatly and IFP Construction are committed to ensuring the new factory is designed, built and operated in a sustainable and environmentally friendly way.

**PROJECT**

**BioRefine opens new plant for production of grass protein**

**The innovative Danish producer of grass protein, BioRefine, chose NIRAS as project leader for its new production plant. The new plant is capable of transforming grass and alfalfa into protein for livestock fodder.**

Grass protein can to a certain extent replace the imported soy protein that is normally used for animal nutrition in Danish stables.

This could contribute to making livestock production in Denmark far more sustainable.

The BioRefine plant is located in Nybro in Jutland and is, in many ways, the first of its kind. Due to its innovative features, the company has filed a claim for a patent for certain elements of the process.



Photo: BioRefine

## **NIRAS plays a prominent role when it comes to sustainable solutions in big infrastructure projects**

We cover all stages in these projects, from preparation of master plans and technical and economic analysis, to design and planning, supervision, operation and maintenance. We have a cross-disciplinary specialised knowledge with a guarantee of complete solutions, whether we make 3D-models of a footbridge, plan a motorway, draw a light rail line or design a harbour.

### **PROJECT**

A large climate and coastal protection project in Egypt

**The Government of Egypt has hired NIRAS to participate in a comprehensive climate adaptation project to protect and plan the future of one of the world's largest low-lying coastal and delta areas.**

The project aims to protect the 1,000-km-long Mediterranean coastline in Egypt and the vast Nile Delta, which is under strong pressure due to climate change leading to coastal erosion and increased risk of flooding of the delta. The project will in the short-term prevent floods by constructing 70 km of nature-based protection at five vulnerable hotspots. NIRAS must prepare a plan for integrated coastal zone management (ICZM), which in the long-term must ensure that

the area can adapt and resist climate change in the best possible way.

### **PROJECT**

One of the largest coastal protection projects in Denmark

**Koege Dike has been named an area at risk of floods in accordance with the European Union's Floods Directive. NIRAS and LYTT Architecture have been chosen to carry out the Koege Dike project, which will protect 19,000 citizens along the 11 km long coastline in Koege municipality.**

NIRAS performs total consultancy in connection with the preparation of project proposals, retail projects and tenders for EU tenders, in which consultancy is also provided in connection with the assessment of contract tenders and contracting. Koege Dike will reach an altitude of 2.8 meters above sea level. At Koege Port and Marina, and other selected areas, a series of protective tidal walls and mobile solutions will be constructed.



**"In a rapidly changing world with immediate demand for climate action, we are committed to and proud of delivering sustainable and resilient solutions. Be it coastal protection in Egypt, energy islands in the North Sea, railway infrastructure in Norway, cycle paths in rural Denmark or improved urban spaces in the inner cities. Based on our vast experience and broad expertise, we strive to help our customers with necessary changes and adaptations in the infrastructure sector."**

- Carsten Heine Lund, Senior Vice President, Infrastructure

### **PROJECT**

Passengers' perceptions of fear of crime at train stations influence our mobility patterns

**Architect and Ph.D. Sofie Kirt Strandbygaard is NIRAS's new specialist in crime prevention through environmental design (CPTED) and transit-oriented development (TOD). Using a series of strategies and methods, she is focusing on fear reduction and improved social sustainability in mobility planning.**

"When you work with security in urban spaces, you work with a series of factors. Factors such as off course lighting and human activity play an important role, but it is also crucial to show that a positive social norm and ownership exists in the urban space. You can achieve this through an attractive design, maintenance and indications of personal ownership," says Sofie Kirt Strandbygaard.

This influences not only mobility patterns but also social sustainability and economic growth in urban areas.



Copenhagen Metro

Photo: PhotographerCW

## PROJECT

Together with subconsultant Jacobs, NIRAS has won two large framework agreements with Copenhagen Metro and Greater Copenhagen Light Rail

**The framework agreements have a duration of eight-years and include civil works, transport systems and railway techniques.**

The projects within the framework agreement can include consulting in relation to the development of new metro and/or light rail lines, design tasks and maintenance of existing lines and other installations. The areas of expertise will include tunnels, geotechnical engineering, alignment, electrical and mechanical installations, stations, railway safety, driving material and environmental issues.

Among the potential future assignments that could form part of the framework agreement are the expansion of the Copen-

hagen Metro at Nordhavn and a new metro line to the projected artificial island of Lynetteholm in the port of Copenhagen.

## **When it comes to pharma and life science investments, project implementation, and optimisation of production plants, NIRAS delivers professional results**

Based on our in-depth knowledge of pharmaceutical products and processes, we can translate visions and challenges into sustainable solutions - from initial idea to a fully operational, validated plant.

### **PROJECT**

Upgrading project at Fujifilm Manufacturing in Hillerød

### **NIRAS participates in a cluster of process capacity upgrades at Fujifilm Manufacturing Site Hillerød.**

The projects includes new washing and autoclave equipment and optimisation of CIP supply and functionality. The common challenge is to incorporate the changes while the production facilities are in operation.

Detailed modelling of process piping and specification of equipment prepared for paperless documentation are important areas of expertise in this complex collection of projects.



**"NIRAS has witnessed tremendous growth within pharma and life science during the last year. With the acquisition of AlfaNordic, we have enhanced our capacities greatly. Consequently, we can now offer a full range of services within planning, project design, project management and consultancy for pharma and life science companies. Likewise, NIRAS Life Science Academy ensures our company and our clients the future talents of the sector."**

- Thomas B. Olsen, Senior Vice President, Process Industry



#### PROJECT

New veterinary laboratory for Statens Serum Institut

**Statens Serum Institut wants a new veterinary laboratory to tackle serious animal diseases.**

The veterinary building has been created for emergency preparedness and research into serious infectious viral diseases in domestic animals, such as Foot and Mouth disease, bird flu, rabies and classical and African swine fever.

The majority of the samples that arrive will be blood samples, swab samples or samples from organs, but the laboratory can also receive dead animals.

The building is 2,700 square meters, has advanced furnishing and is highly secure and very dense. NIRAS has helped with project management and consulting.

# Water

## **NIRAS has engineers and water specialists with profound expertise in all elements of the water cycle**

We help our clients to secure the drinking water supply of the future when designing the next generation of water treatment and process plants. We offer consultancy that future-proofs wastewater plants - in relation to climate change, resource recovery and efficiency requirements. We design climate adaptation as integrated urban and nature based solutions, and we build large-scale cloud burst tunnels and all types of pumping stations as well as coastal and flooding protection in close collaboration with our experts from infrastructure.

### **PROJECT**

HOFOR is building a cloudburst tunnel at Kalvebod Brygge

**In the years to come, HOFOR (Greater Copenhagen Utility) will construct a number of cloudburst tunnels under the ground in Copenhagen, which will protect the Danish capital against flooding. In the event of massive cloudbursts, this underground tunnel will lead the rainwater to a large pumping station, which will subsequently pump the water into Copenhagen harbour.**



This 2½ meter tall plexiglass model is a true copy of the planned pumping station by Kalvebod Brygge in Copenhagen. The purpose of the model is to test that the pumps will work as intended, when the pumping station is constructed in its full size.

*Photo: NIRAS*

An international team of consultants led by NIRAS has worked to plan Kalvebod Brygge Cloudburst Tunnel. The design phase itself is incredibly important because we must ensure via thorough planning that errors and challenges are handled before excavators and tunnel boring machines get started. Therefore, the advisory team has designed the cloudburst tunnel down to the last detail with advanced 3D models in a building information model.

The tunnel is expected to be completed in 2026.



**"As water professionals, we face multiple challenges around the world in our work for more sustainable and climate resilient societies. Our trademark is the cross-cutting approach - we always strive to achieve the optimal solutions working across engineering disciplines. With this mindset, expert consultants from NIRAS help locate groundwater reservoirs in Malaysia, reduce water losses in the Middle East, digitise water distribution networks in Norway and prevent flooding in Danish cities."**

- Jens Brandt Bering, Senior Vice President, Utilities

## PROJECT

Utility company in Aarhus obtains new knowledge about their wastewater

**An innovation project in the city of Aarhus provides new insights into the types of water that run in the sewers. Using sensors, 'data crunching' and machine learning, the project has mapped so-called 'water infiltration' - ground and rain water that unintentionally runs into the sewers.**

NIRAS has contributed principally in the final phases of the project where data is entered into a machine learning-model. This makes it possible to find the places in the distribution system where the water is most likely to seep in. In this way, the water infiltration can be divided into sources - e.g. groundwater, rainwater or incorrectly connected water. The local utility company can use the model to plan repairs and maintenance, so as much superfluous water as possible is removed in a cost-effective way.



Photo: NIRAS

## NEWS

Laboratory of Fish Ecology becomes part of NIRAS

**NIRAS has acquired Laboratory of Fish Ecology - a consulting company with experts specialising in inspection of animal- and plant life in streams and lakes.**

In July 2021, Laboratory of Fish Ecology became part of NIRAS.

Now, we can offer our clients a strengthened profile with regard to biodiversity protection, nature inspections and restoration projects in watercourses, lakes and nature areas.

For more than 30 years, Laboratory of Fish Ecology has worked for a better natural and water environment through countless nature restoration projects such as watercourse and lake restorations, but also as nature communicators.

In NIRAS we are rapidly expanding our presence in the Norwegian market and we have had a strong foothold in Norway since 2012. Spread across offices in Oslo, Stavanger, and Drammen, our 60 Norwegian experts provide a wide array of services. Especially within infrastructure, we have several notable projects, where we are heavily involved in delivering railway projects across Norway and thereby contributing to more effective and sustainable mobility.

## PROJECT

Large infrastructure project to improve Intercity connections in Eastern Norway

**The project will improve capacity for both passengers and freight and provide better rail journeys for the people living in the eastern part of Norway.**

The project is part of Bane NOR Intercity upgrade, including 270 km of new double tracks in the South East part of Norway. The project includes 10 km of double tracks and 5 km of tunnel.

The project requires several skills and experience in collaboration and partnership. It involves disciplines such as: Special foundations, groundworks, earthworks, concrete works and of course tunnel blasting works.

The new double track rail line is planned to be fully operational at the end of 2024.

## PROJECT

Railway Depot Ski South

**The major railway project in Norway: Railway Depot Ski South, concerns the development of preliminary design for a train support facility for 55 trainsets (FLIRT passenger trains) and a new 6 km railway line including roads, bridges, drainage and environmental issues.**

The Ski Depot project is critical to the development of the infrastructure in the central part of Østlandet. This is an important project for Bane NOR.

The contract was won because NIRAS and our partners delivered the best offer in terms of technical solutions and competence. In the tender evaluation, the NIRAS team scored maximum points on "Project understanding" and "Competence".

The project helps to ensure the development of NIRAS's office in Norway and at the same time ensure a strong interdisciplinary collaboration between Denmark and Norway.



Photo: NIRAS



**"In recent years, NIRAS in Norway has experienced a strong growth, and this is often related to the sheer quality of our work, which is due to the cross-organisational setup that we apply to our infrastructure projects. Two factors in particular have contributed to our success in the Norwegian market. Firstly, there is strong and smooth internal collaboration across NIRAS departments and national borders, where we focus on our clients' projects and joint success. Secondly, we enjoy long-term and trusting collaboration with other consultants, who each contribute with their special competencies, which ensures our clients strong, close-knit teams of advisers."**

- Theis Tarp Rasmussen, Managing Director  
NIRAS Norway



**PROJECT**

Large infrastructure projects to improve rail efficiency between Drammen and Kobbervikdalen in Norway

**The time spent on travelling will be reduced and the frequency of train departures will increase for one and a half million Norwegians when Bane NOR expands the railway system in south-eastern Norway.**

Together with Dr. Techn. Olav Olsen Artelia Group, a structural engineering and marine technology consultancy, NIRAS has been appointed adviser on two major turnkey projects for the construction of a double-track railway line between Drammen and Kobbervikdalen.

NIRAS is responsible for the project management, the overall 3D project models, a rock tunnel, concrete constructions, a cut-and-cover tunnel, drainage, the rerouting of cables, the rerouting of roads and the railway substructure.

The project is expected to be completed in 2024.

Our local presence and strong networks in Sweden allow us to offer interdisciplinary solutions that are tailored to the unique needs of our clients. We offer a full range of engineering services in everything from building and project management to infrastructure, process industry, and energy to name a few. Our Swedish offices furthermore offer high-end architectural and corporate real estate services to both private and public clients.



**"Overall, 2021 was a positive year for NIRAS in Sweden. Markets started to return to normal after the effects of COVID-19, and we managed to reach a series of our development targets. Our long-term strategy is to become our clients' preferred partner when it comes to community buildings and a number of service areas. In 2021, we took significant steps in our development towards growth and establishment in more locations. Among other things, we gained new projects and clients within the area of water construction which led to an increase in both our turnover and staff. We also won new municipal clients in both Sweden and Norway where we as part of several other activities support planning and adaptation in relation to torrential rain. We are confident that this positive development will continue in 2022."**

- Christian Sandberg, Director NIRAS Sweden

## PROJECT

NIRAS has been an advisor to NREP in their largest acquisitions of community properties

**Property management company Stenvalvet has sold a portfolio consisting of 13 communal properties located in Stockholm/Mälardalen, Dalarna and Skåne. Altura, part of the real estate group NREP, was the buyer. In total, almost 500 senior apartments are included and NREP acquired the properties at the beginning of February 2022.**

In addition to performing technical due diligence, the assignment also included looking at optimisation and energy efficiency, where the recommendation was to install new solar panels and improve the indoor environment by optimising installations for modern and more energy efficient systems.

## PROJECT

New head office of 4,500 square meters for a large consulting company in Stockholm

**NIRAS acts as internal project manager with responsibility for project management to the lessor and handles all questions concerning the project.**

Knowit is a large consulting company with 3800 employees that supports companies and organisations in the digital transformation. With a unique combination of competences within it, design, communication and management, they develop innovative and sustainable solutions that contribute to a high business value for their clients.

The new head office for 800 employees will be ready in the summer of 2022.



NREP office

# Learning programmes and collaboration with universities

To help drive sustainable development in collaboration with our clients, our dedicated specialists, project managers and leaders take responsibility and make a difference for our clients. We have a culture with strong responsibility for the individual and an informal and flat management structure that enables our employees to develop both professionally and personally.

For NIRAS, education and continued improvement of skills is a high priority. In 2021, we strengthened our focus on education by dedicating additional funds to this area. Likewise, we continued our cooperation with different universities in a variety of subjects, not least in order to train and attract new graduates. We also worked to enhance our competences within cross-cutting project management as part of our programme for supporting talent. Finally, we offered a series of courses and training for young graduates as part of our different trainee programmes and academies, which include participants from different countries across the world. Thus, we have various initiatives that inspire and enable our employees to develop a high level of competencies.

## #4 Quality education

NIRAS actively encourages lifelong learning and promotes collaboration with educational institutions.

This will be insured by:

- **Identifying relevant educational institutions with whom we can engage and promote collaboration internally and externally.**
- **Implementation of a new learning management system (LMS) to support everyday learning in projects.**
- **Introducing a dedicated fund for specific competence development that is not part of the Business Unit's budgets and to which applications can be made. KSU (our Danish employee committee) has approved the application process.**

Lifelong learning will be measured by the Employee Satisfaction Survey in the sections about "Your Development" and "Satisfaction and Motivation", time and money spend on education will be registered as well as number of Ph.D. students.



Photo: NIRAS

### **NIRAS Scandinavian graduate programme**

The graduate programme was launched in October 2021 and is an initiative designed to attract skilled, newly graduated employees to NIRAS in Norway and Sweden within the following sectors: environment, utility and infrastructure. Over 21 months, participants are posted in 1-2 departments in Denmark or Sweden for approximately one year to increase their network and professional competencies across borders. Thereby they will also contribute to strengthening their respective sectors in their home country at the end of the programme.

### **Talent Programme**

This year's 'Project Management' talent programme focuses on project excellence and management of complex projects across disciplines and sectors. The 19 participants come from six different countries and are spread across all of our six sectors.

The programme lasts one year and has seven sessions focusing on specially selected themes. Each of the participants is connected with a highly experienced project manager who will be a mentor for them during the course, both in relation to the topics they are working with and in implementation of their project. During the programme, all participants are divided into smaller groups for discussions and sharing of best practices in relation to the different topics. The participants also work with their own personal development in relation to project management.

### **NIRAS Life Science Academy**

In 2021 we engaged in the 2-year graduate programme that offers young newly graduated candidates in the pharma industry a unique combination of work, further education and coaching.

The participants gain professional experience, where they are equipped to solve the industry's challenges as a specialist, production supporter or project manager in the pharma, life science and food sectors. The young graduates are employed by NIRAS for a period of two years, during which they are sent out as junior consultants to work at a number of Denmark's leading pharma and life science companies. The programme includes a teaching course of eight modules, mentoring, coaching, ongoing development talks and a bootcamp.

### **NIRAS ALECTIA Foundation**

The Foundation primarily focuses on supporting Ph.D. programmes within NIRAS's business areas in the countries where NIRAS is represented. By supporting innovative and sustainable Ph.D. projects, the valuable collaboration with universities and other research environments is promoted, while NIRAS services are able to progress alongside the latest research.

## **Examples of Ph.D. projects**

### Optimising the implementation of drinking water softening



Focusing on the quality of drinking water, Camilla Tang investigated how softening technologies can be evaluated and compared. During her project, a set of drinking water indicators were developed, which will enable water utility companies to implement softening based on an economic and scientific foundation.

### Operationalising the Sustainable Development Goals



Mia Heide developed an operational method for assessing the sustainability of different industries in relation to both the UN's SDGs and absolute sustainability targets. The intended outcome of the project was to provide the stakeholders involved in building projects with a tool to quantify and document sustainability in an absolute context and in relation to the SDGs across the lifecycle of a building.

### HYDROsim



Mathias Busk Dahl is developing a methodological framework that will enable professionals to predict the effects of different groundwater impacts over time. Such impacts for instance include drinking water abstraction, pollution or different extraordinary weather conditions. Furthermore, the project will enable uncertainty estimations, thus giving decision-makers a well-informed foundation on which to base decisions, while taking calculations and their associated uncertainty into account.

# Ensuring a healthy and safe work environment

With 2021 being another year marked by COVID-19, we have focused on both the physical and mental health of our employees who had to work from home during lockdown periods.

Furthermore, our projects and in-house operations must be executed in such a manner that we – to the highest possible extent – secure the health, safety and welfare of all stakeholders or any other parties who could come into contact with our activities.

In connection with the performance of the work, it must also be ensured that there is no risk of physical or mental health deterioration as a result of abusive acts, including bullying and sexual harassment, for which special policies have been drawn up in NIRAS.

## Our policies on a healthy and safe environment

NIRAS aims to take a holistic approach to the work environment, making space for “the whole person” within a safe and healthy workplace, where employees are satisfied with their jobs and can develop both professionally and personally. We want to minimise stress by focusing on preventive activities. Through early intervention, our goal is to reduce stress-related sick leave although we do not have a high level of stress today.

We have a basic assumption that employees who are affected by stress can return to work fully and completely. We ensure this through personnel management and individual counselling and training and through HR policies and support.

When bidding, planning and designing, NIRAS takes into account the safety and health conditions that may arise during the execution of the specific project as well as subsequent operation and maintenance.

NIRAS has zero tolerance towards sexual harassment or bullying and we have continued our prevention work by carrying out awareness raising and surveys.

## Actions and outcome

During lockdown periods, we offered advice on how to create the best possible work spaces and carried out a series of support activities and social online events in order to keep up the spirit among our staff. To the extent it was possible, we held a few physical social events at our office in strict accordance with the recommendations of local health authorities. As part of our prioritisation of staff’s work-life balance, we worked to meet the needs of senior employees by letting them transfer to part-time contracts or less time demanding consultancy roles, if they wished to do so.

## #3 Good health and well-being

### Employees are NIRAS’s most important resource

NIRAS actively aims to maintain the good mental and physical health of all our employees.

This is ensured by:

- **Offering good physical working environments and work stations**
- **Strengthening efforts to prevent stress, including awareness of possibilities for flexible working hours and working from home.**
- **Continuing to fund and raise awareness about exercise opportunities and social clubs in NIRAS offices.**

The above initiatives are measured by the Employee Satisfaction Survey, where we maintain the group index score of 85% in overall satisfaction. The score for the mental work environment should be maintained at 4.3 (on a 5-point scale) and we aim to achieve a sickness absence rate for long- and short-term illness of 3.5% in 2021-2023.





We have an established health, safety and welfare organisation in accordance with the rules of The Danish Working Environment Authority. Furthermore we established work environment procedures that are in accordance with Danish working environment legislation. The procedures must be known and followed by all employees.

All employees can become a member of a health insurance and pension scheme which also includes insurance in case of death, critical illness and reduced earning capacity.

NIRAS employees are free to join trade unions and enter into collective bargaining with management. All our employees have individual contracts, and the employment conditions comply fully with current national legislation and requirements.

In order to measure and improve NIRAS as a workplace, we carry out our employee engagement survey every other year, which each time has given us very reassuring results on employees' overall satisfaction with NIRAS.

# Gender equality

It is our responsibility to ensure that all NIRAS employees are treated equally. This is reflected in our global company policies and the way we conduct our daily business.

Consequently, we focus on equal opportunities and equal pay regardless of gender and based solely on qualifications and experience (i.e. same performance, same pay approach). This is ensured through our employment and contractual policies and annual reviews of payment statistics for men and women.

## Actions and outcome

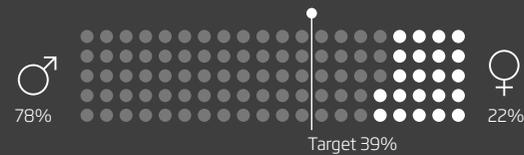
We ensure equal representation of women and men in our talent programme, our academies and other educational activities. We strive to have a representative share of women at management levels that is equal to the number of men and women employed in NIRAS. Likewise, we also promote role models and provide mentor opportunities for women who want to be leaders.

The target for representation of the minority gender in the Board of Directors is 25 %. In 2021, the number of women's representation in the Board of Directors was 20 %. It has been decided to have general election for the board in 2022. The board will be expanded by an extra female board member which should lead to reaching the goal for the gender distribution of the board.

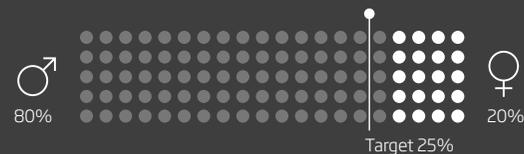
## Employees



## Leaders at all levels



## Board of Directors



## #5 Gender equality

NIRAS's focus is on equal opportunities and payment regardless of gender.

This is ensured by:

- **Reviewing payment statistics for men and women.**
- **Promoting role models and providing mentor opportunities for women who want to be leaders.**
- **Ensuring equal representation of women and men in our talent programmes and other educational activities.**
- **Developing and supporting new forms of management, e.g. shared management.**

Our progress in this area will be measured by a representative share of women at management levels equal to the number of men and women employed in NIRAS as well as the maintenance of equal payment in relation to qualifications and experience.

### Global gender equality commitment

As part of our human rights-based approach, gender equality continues to be an area of high priority. In 2021, NIRAS in Indonesia and in Sweden became signatories to the WEPs (Women's Empowerment Principles) established by the UN Global Compact and UN Women to promote gender equality and women's empowerment in the workplace, marketplace and community.

This forms part of our work towards transformative change and gender equality and we are actively working to get more offices to sign the WEPs. During the year, NIRAS carried out approximately 380 development projects in more than 80 countries under the 17 SDGs. We mainstream rights issues into the design and implementation of our programmes, using a human rights-based approach and tools, such as gender mainstreaming, and identifying risks for discrimination to improve the situation for disadvantaged groups thus contributing to SDGs 5, 10 and 16.

We have a Gender and Human Rights Unit which leads gender equality development cooperation projects to, for example, improve women's participation, leadership, and economic empowerment, reduce gender-based violence and ensure gender-responsive national budgets. The unit supports a variety of projects in different sectors to integrate a gender perspective throughout the project lifecycle.



### Supporting the EU and Sida on gender

In 2021, NIRAS supported the Swedish International Development Cooperation Agency (Sida) and the European Union by covering a variety of thematic areas and offering broad expertise and human resources support. During the year, we have provided helpdesk assistance within the following areas: gender mainstreaming and a rights-based approach; gender support service to the EU's Gender Action Plan; gender reform for Eastern Partnership countries; global health and sexual and reproductive health rights; peace and human security; and democracy and health rights.

### EU for Gender Equality Reform Help Desk

NIRAS provided support and technical assistance via the EU for Gender Equality Reform Help Desk to assist the European Union, the UN Population Fund, and UN Women to launch a programme in Armenia, Azerbaijan, Belarus, Georgia, Moldova, and Ukraine. The programme challenges gender stereotypes and harmful practices against women and girls, and increases men's participation in areas such as child care and the fight against gender violence. The aim is to increase use of a gender analysis in decision-making and reforms, policies and programmes to make sure to deliver effective and equal results to all, both women and men.



# Responsible organisation

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As a global company, NIRAS feels a keen sense of responsibility and commitment to contribute to solving some of the biggest challenges of our society. On thousands of worldwide projects, we help our clients realise their sustainable potential by means of our specialists' expert knowledge. Consequently, NIRAS's work is inseparably connected to reaching the 17 sustainable development goals created by the UN in 2015.

## **Living up to international principles and guidelines**

We are a signatory to the UN Global Compact and through our membership of FRI, we are a member of the International Federation of Consulting Engineers (FIDIC). Consequently, we are committed to upholding a number of international principles. We work systematically with a Business Integrity Management System as a tool to prevent any kind of corruption. Our policies are in accordance with OECD and FIDIC recommendations.

## **Human rights**

NIRAS considers the UN's Universal Declaration of Human rights as the unequivocal and irrefutable international proclaimed rights of all human beings. We fully subscribe to international charters and conventions on human rights and gender equality.

Our Integrity Management System guides the way we conduct business, both internally and in our external projects around the world. This is implemented through specific actions, such as alignment with both international and national laws in the countries where we work, and by transferring national standards into internal policies for human resource management and work-related policies, such as signing a Modern Slavery and Human Trafficking Statement. Likewise, NIRAS has a Safeguarding Policy and a whistleblowing arrangement so employees can report any wrongdoing in a safe and also anonymous manner, if they prefer.

## **Our policies on human rights**

NIRAS subscribes to charters and international conventions including those on Rights of the Child, Rights of Indigenous People, gender-related issues such as Elimination of All Forms of Discrimination of Women as well as the LGBT+ rights. NIRAS promotes a tolerant and inclusive work environment with a set of specific guidelines on anti-bullying and prevention of sexual harassment that sets zero tolerance towards harassment or discrimination.

At NIRAS, we believe that diversity ensures our clients a better quality of service and creates an inclusive in-house environment. The culture and values of

NIRAS are based on respect for the individual, which implies acceptance and tolerance of diversity among colleagues and clients.

## **Expectations for the future work**

We will continue to update our guidelines, policies and processes to ensure all employees equal opportunities regardless of gender, age, race, religion, nationality, ethnic and social origin, disability, political or sexual orientation, and family status. We will continue to work with clients and projects to improve human rights.



# Anti-corruption and transparency

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NIRAS and all companies within the NIRAS Group have a zero-tolerance policy on corruption, tax evasion and fraud as well as any form of modern slavery, discrimination, and harassment. NIRAS defines 'corruption' broadly. For example, if not correctly managed, 'conflict of interest' and 'obtaining undue advantages' represent situations that have a potential for becoming corruption.

NIRAS's anti-corruption policy includes an obligation on NIRAS to fight corruption in all its forms. NIRAS's Business Integrity and Ethics Policy as well as our Code of Conduct are compiled into NIRAS's Integrity Management System. The system and supporting policies are in compliance with the international anti-corruption instruments defined by OECD, FIDIC, Transparency International and the UN. NIRAS's Business Integrity and Ethics Policy is documented, implemented, communicated internally and externally, and made publicly available. When signing an employment contract with NIRAS, all staff members undertake an anti-corruption training and agree to abide by NIRAS's Integrity and Ethics Policy and our Code of Conduct.

## **Risks and precautions in relation to corruption**

NIRAS is carrying out 7,000 projects in some 100 countries across the world, some of which are more exposed to corruption than others. Therefore, our

work is also being carried out within a certain risk margin of individuals or companies possibly intending to enact acts of corruption.

However, NIRAS is adamant that all such attempts of corruption or other violations or acts of non-compliance of our ethical standards will be fully investigated, and that they will be met with the full force of the law, where sufficient evidence is obtained.

In order to prevent any sort of non-compliance with our ethical standards in the future, every business unit and member company of the NIRAS Group must stipulate goals and actions for maintaining integrity, and must seek continuous improvement in order to further ensure the continuation of the high ethical standards of the company

## **Whistleblowing**

NIRAS's corporate Compliance Unit (NCU) has been established to combat corruption in all its forms. NCU serves the entire NIRAS Group and reports directly to the company's CEO. The unit is responsible for anti-corruption measures including training, handling of corruption cases and our whistleblowing arrangement that concerns corruption. NIRAS's HR Department is responsible for handling whistleblower cases that concern harassment, bullying and discrimination.

Where necessary in 2021, we adapted our whistleblowing arrangement to the requirements of the 2019 EU Whistleblowing Directive law as spelled out in the danish Whistleblower Protection Act that came into force on 17 December 2021. Whistleblowers always report confidentially. They can report either openly or completely anonymously. All NIRAS employees are informed about NIRAS's whistleblowing policy and a how to report on corruption, suspicions of corruption, harassment, bullying and discrimination. A complete description of our policy and guidelines for whistleblowing can be found on both NIRAS's corporate websites and intranet.

NCU or NIRAS's HR Department are obliged to conduct in-depth investigations of all reported incidents. If NIRAS's code of ethical behaviour has been violated, the consequence can range from sanctioning by NIRAS to handing over the case to the police.

## **Actions and outcome**

NIRAS's Integrity Management System is continuously being reviewed and updated to secure the best possible compliance with national and international law and with NIRAS's Business Integrity and Ethics Policy.

A series of anti-corruption awareness activities have been carried out, including courses and online tests and questionnaires for employees in order to monitor the level of awareness and information within the organisation. For activities and projects in Western Europe, NIRAS did not experience any severe internal violation of our Business Integrity and Ethics Policy in 2021. However, for activities in developing countries, there have been a few examples of violations which have led to either reprimand or dismissal.

NCU has streamlined its reporting to NIRAS's Board of Directors by supplementing its annual report with an overview of all whistleblowing cases, their status, actions taken and outcomes. The overview is being updated and made readily available for all ordinary board meetings.

If there are reasonable grounds to suspect that corruption has taken or is taking place in public or donor-funded projects, NIRAS is obliged to report such incidents to the respective donor or public organisation's anti-corruption/ fraud office, who then, if it finds grounds for the suspicion, will initiate its own investigation. In 2021, NIRAS has not been approached by any government agencies asking for bribes.

We believe this is an indication that NIRAS's zero-tolerance policy and our immediate reporting to the donor organisations is working well. NIRAS has met the performance and targets for 2021 satisfactorily.

#### **Expectations for the future work**

We will continue our rigorous approach through policies, education, and control measures to ensure that all our ethical standards are met fully, and that all possible attempts of corruption or any other violations of our anti-corruption and transparency policies are rooted out. It is our expectation that these efforts will continue to keep any possible violations of NIRAS's ethical standards at an absolute minimum.



Photo: NIRAS

## Data ethics

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Guidelines on data ethics are implemented in accordance with the Danish Financial Statements Act section 99d.

The guidelines describe how data ethics are considered and included in the use of data as well as the design and implementation of technologies used for processing of data within NIRAS. The Group's integrity committee reviews and assesses the adequacy hereof on an annual basis. The guidelines are available for all employees on InNIRAS, our intranet, and on our website: [www.niras.com/data-ethics/](http://www.niras.com/data-ethics/)

# Obligation to reduce resources

NIRAS's main contribution to the SDGs is rooted in the thousands of projects where we deliver sustainable impact with our clients and partners. As a people business, NIRAS's own negative impact is limited, but we have a responsibility to act where we can, and it is our clear ambition to help create sustainable impact and contribute to the SDGs. We are determined to improve our performance regarding the use of resources, minimising waste, and reducing CO<sub>2</sub> emissions.

During the year, NIRAS in Denmark has worked incessantly to improve our own environmental impact and to enhance our sustainability results. NIRAS has developed an action plan to ensure our contribution to SDG 12 and SDG 13. Some of our initiatives have been implemented and are contributing to NIRAS being an even greener company on a daily basis, whereas others are not fully implemented yet. One of our main aims is to establish a coherent system of goals, roles and responsibilities, processes, and instructions. Our goal is to achieve the ISO14001 Environmental Management certification in 2022. NIRAS in United Kingdom achieved its first ISO14001 credential in 2015.

## #12 Responsible consumption and production

### Buying green and reducing waste

In 2021, NIRAS developed a new green procurement policy, which contains requirements on buying green and minimising waste where possible. Consequently, a minimum of 30% of our acquisitions will have an environmental certification. At our head office in Denmark, our catering predominantly serves organic food, and all cleaning products used at the office are certified as environmentally friendly. Furthermore, we have taken other measures such as minimising food waste and reusing IT equipment and furniture to minimise waste production and promote recycling.

We have also established a new network of in-house consultants with expertise in sustainability to improve the sustainable development of our internal competences and business. In 2021, NIRAS opened its new Green Tech Hub to attract Green Tech partners. When we refurbished the building, we used recycled furniture to equip the facilities.

## #13 Climate action

### Climate action and reducing CO<sub>2</sub> emissions

NIRAS aims to be CO<sub>2</sub> neutral in scope 1 and 2 in 2030. A detailed action plan for achieving CO<sub>2</sub>-neutrality for NIRAS is currently being prepared. Carbon neutrality will primarily be achieved through conversion from gas boilers to heat pumps and from fossil-based cars to electric cars, and we have increased the number of charging stations at our headquarters. NIRAS reports on scope 3 in the climate accounts and has launched initiatives to reduce scope 3 footprint in cooperation with our suppliers. NIRAS has also continued its cooperation with a company that refurbishes and sells used IT equipment. Our used computers, phones and other electronic equipment are being restored and sold, thus indirectly helping others to save resources and keep CO<sub>2</sub> emissions down since new electronic devices will not be produced.

In the future, NIRAS climate and CO<sub>2</sub> targets will be reviewed annually, and we are currently in the process of creating a BI (business intelligence) format for more efficient and detailed reporting on our annual climate accounts. Succeeding in meeting the above objectives related to SDG 12 and 13 will support the new NIRAS corporate strategy to reach organic growth and project excellence.



### The effects of COVID-19 on SDG 12 and 13

The COVID-19 pandemic has influenced our use of workspace, and we have applied a combination of homeworking and use of office space. We have reduced the use of water and production of waste, due to the limited time employees have spent at the office. Also, virtual meetings have limited the need for transportation to clients, which used to be a dominant factor in the climate accounting. However, other resource consuming activities are less dependent on the number of people in the building, such as renting, heating, and cooling, and the practices around waste collection. COVID-19 has led to an increased use of cleaning products and purchase of additional IT equipment and furniture. However, COVID-19 has also forced us to adapt and think differently, and we will benefit from the lessons learned.

# NIRAS Green Tech Hub

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It lies deep within NIRAS's DNA to contribute to improving social and environmental issues through the services we offer our clients and the way in which we operate as a business and an employer. During 2021, we have ventured into a new business area by establishing a Green Tech Hub at our headquarters. Here, we help new green start-ups succeed with innovative, sustainable solutions and business models that can help overcome the environmental and social challenges of our time.

The idea to establish a green technology hub in an environment where start-ups can get inspiration from others was fostered by the NIRAS Foundation. The ambition is to promote close collaboration between start-ups and NIRAS's many experts, with sustainable and innovative ideas and solutions providing stimulus to both the individual start-ups and our own business activities.

The plan is also to embrace NIRAS's clients in collaboration with relevant start-ups at the hub and in that way to strengthen our brand as an attractive partner and a workplace with an even greater focus on the green agenda and sustainable technology solutions. One of the fundamental purposes of creating the hub was to support the sustainability strategy of the NIRAS Group. It is also our clear ambition that the hub

will play an important role in the eco-system of start-up companies with a sustainable agenda in Denmark and internationally.

## **The start-ups**

The start-ups range from small businesses with few employees to medium-sized firms. What they have in common is that they are passionate knowledge experts in their fields and have an idea, product or solution that relates to one or several of NIRAS's various business areas.

They are businesses aiming to develop their green technology idea from having just one product and perhaps a few clients into a reasonable business within a few years. They come from all corners of the world, but preferably in geographical regions where NIRAS has a presence. They must be curious and interested in seeking inspiration from others and contributing to establishing a network among the start-ups at the hub.

Our aim for the hub is to create an innovative incubator with room for individuality and space for both great ideas and workshops, laboratories, machinery, hardware production and products that do not easily fit elsewhere.

## **Facts about the warehouses and the hub**

A warehouse and assembly hall for light manufacturing and technical activities (approximately 2,500m<sup>2</sup>) and open-plan offices with common facilities and networking areas (approximately 2,500m<sup>2</sup>).

In addition to start-ups, the hub accommodates activities such as our TV studio, a drone warehouse and workshop, a test set-up area, project work in connection with NIRAS projects that require space. Moreover, we envisage hosting events. You can read more about the current residents and follow the development of the hub on: [www.nirasgreentechhub.dk](http://www.nirasgreentechhub.dk)

# NIRAS GREEN TECH HUB



# Realising your sustainable potential

