

# Maximizing Our Impact

Our sustainability goals for our clients, our company, and our communities

The Arcadis Global Sustainability Strategy 2021-2023





**Peter Oosterveer** Chief Executive Officer and Chairman of the Executive Board

WBCSD Executive Committee Member

"Our company's story began back in 1888 in the Netherlands. We started out developing unusable land into places for people to live and establish communities. Our name comes from the ancient Greek 'Arcadia', a mythical utopia in which people live in harmony with nature. And our logo's icon is the fire salamander, an animal that thrives only in a wellbalanced ecosystem.

Given our origins and the fact that improving quality of life has always been at the heart of what we do, it is only natural that we would evolve into a company driven by our commitment to maximize our impact in creating a more sustainable world." We place sustainability at the heart of everything we do. This is the evolution of our company's purpose: improving quality of life. Our work, making communities more resilient, developing livable places, and enhancing mobility, provides long-term solutions for some of the most complex challenges of our time.

We take a holistic view of sustainability. For a solution to be sustainable, it must be good for the planet, beneficial for people and communities, and economically viable.

As we look to the future, we aim to improve quality of life with every project we do and to give our clients and our own people a deep sense of pride in working for the common good.

"Our company has a rich history of improving quality of life for people all around the world. We've also been very focused on sustainability over the past two decades, but we recognize that we need to find new ways to maximize our impact. Given the challenges we're all facing, all companies must accelerate efforts to establish a truly sustainable global economy. This is why we have decided to embed sustainability into our business strategy. It's also why we're empowering our clients and all Arcadians to create sustainable communities where all people can thrive."

Grant Sprick Global Sustainability Director

## **Sust** Our amb and positi sustainal not only and social solutions people a

**Sustainability at Arcadis** 

Our ambition is to make a significant, quantifiable, and positive contribution to the achievement of sustainable development. We do this by maximizing not only economic benefits, but also environmental and social benefits. We achieve this through our client solutions, business operations and engagement with people and communities.





"Sustainability creates value for businesses. This goes far beyond merely satisfying demands from investors, customers, employees, and other stakeholders. Companies that embed ESG considerations into the way they operate can reduce costs, grow top-line revenue, gain easier access to investment capital, enhance their reputation, and grow their brand. At Arcadis, we are constantly looking for new ways to use our deep knowledge of markets, technical expertise, and digital tools to help our clients unlock the full potential of their sustainability efforts."



Jessica Francisco Director of Sustainability for North America

We are taking significant steps to achieve our ambition. We have committed to tangible goals across three pillars to ensure we move closer to our sustainability ideals and make the world a better place:



#### 1. Client Solutions: Delivering sustainable outcomes

We are more than 27,000 people, working in over 70 countries. We will provide solutions that address our clients' greatest challenges and deliver sustainable outcomes that positively impact the environment, society, and the economy. We will focus our efforts on developing solutions that focus on energy and carbon reductions, conserving nature and biodiversity, the circular economy, and climate adaptation.

#### **Goals for our Client Solutions**

- We will make sustainability a demonstrable aspect of all our technical and advisory solutions.
- We will make sustainability a part of every project, every bid, and every client engagement.
- By 2023, we will not engage in projects that have a net, long-term negative impact on quality of life or the advancement of the SDGs.



#### 2. Business Operations: Our footprint

We are committed to operating our company in ways that reduce harm to the environment, society, and the economy, while improving quality of life for our stakeholders. We will embed environmental, social and governance (ESG) considerations into our operations and value chain and demonstrate continuous improvements by transparently reporting on our performance.

#### **Goals for our Business Operations**

- From 2020, we continue our journey to net-zero, offsetting all material scope 1, 2 and 3 emissions by investing in high quality, accredited, abatement and compensation programs.
- By 2030, we will have reduced our GHG emissions to operate in line with 1.5C science-based targets. And in 2021, we will continue to formalize our net-zero targets based on the Science-Based Target Initiative's forthcoming net-zero standard.
- From 2023, we will disclose climate and sustainability-related financial information according to The Task Force for Climate-Related Disclosures.
- From 2023, we will include updates on all our non-financial KPIs, as part of our quarterly financial disclosures.
- We will also maintain and improve upon our top-quartile performance as ranked by our core rating agencies.



#### 3. People and Communities: Driving better outcomes for all

Our company's most important assets are our people and the communities where they live, work, and give back to society. We will cultivate a workforce that is diverse, inclusive, and empowered to create a more sustainable world, improving quality of life in communities so that all people can thrive.

#### Goals for our People and Communities

- We will provide appropriate, practical training to empower and equip all Arcadians to deliver sustainable outcomes for clients and help make our own operations more sustainable.
- By 2023, our workforce will be more than 40% female.
- By 2023, we will achieve top quartile performance for professional services, as measured by our "Your Voice" staff surveys.
- By 2023, we will reduce voluntary staff turnover to less than 10 percent a year.
- By 2022, we will develop a globally coordinated platform that fosters community engagement programs for our people, so we can deliver more sustainable outcomes for communities, today (community outreach), tomorrow (environmental conservation), and the future (inspiring careers in design and engineering).

## **Community engagement**

Our commitment to sustainability also extends beyond our client projects. All around the world, our people do pro bono work and volunteer their expertise and time to make communities more livable and resilient. Arcadians have established more the 200 engagement programs that are focused on giving back to the communities where we live and work, as well as helping people in need.

Over the past decade, we have also partnered with <u>UN-Habitat in the Shelter</u> <u>Program</u>, through which more than 2200 Arcadians have taken part in more than 100 missions in 31 countries. Whether it's helping the people of Mozambique assess the damage from a tropical cyclone or developing emergency plans after an earthquake hit Nepal, Shelter missions give our people hands-on opportunities to enrich the lives of some of the world's most vulnerable people. In 2020, we celebrated the 10-year anniversary of the Shelter Program and formally renewed our partnership agreement with UN-Habitat.



"Arcadis' connection with UN-Habitat is just the tip of the iceberg. Sitting beneath this global commitment is a multitude of short and long-term local commitments, made between the people of Arcadis and the communities where we work. These are informal and formal relationships, driven by our people's passion or as part of project legacy goals, all of which aim to bring benefits to local communities and future generations. When Arcadians talk to me about their local initiatives, I can always sense how proud they are to be working to make their communities more sustainable and livable. And that makes me proud to be an Arcadian."

## The Sustainable Development Goals

Our sustainability efforts are aligned with the United Nations Sustainable Development Goals (SDGs). These goals are designed to ensure development that meets people's needs without compromising the lives of future generations. Over the last five years we have oriented our business operations and disclosure practices around the SDGs.

After engaging with a broad set of internal and external stakeholders, we have selected "focused impact" SDGs, where we can leverage our skills, expertise, and global scale to make an outsized, positive contribution to their achievement. We have also selected three "specialized impact" SDGs, where we can also make a positive contribution.

#### Focused impact SDGs





#### 6: Clean Water and Sanitation:

Ensure clean water is accessible and sustainably managed.



### 7: Affordable and Clean Energy:

Provide access to affordable, reliable, and sustainable energy sources.



### 9: Industry Innovation and Infrastructure:

Build resilient infrastructure, promote inclusive and sustainable development, and foster innovation.



### 11: Sustainable Cities and Communities:

Make cities and communities safe, inclusive, resilient, and sustainable.



#### 13: Climate Action:

Take urgent action to mitigate the effects of climate change.



#### The World Business Council for Sustainable Development

Central to our strategy of aligning with the SDGs is to work closely with the World Business Council for Sustainable Development (WBCSD), a global, CEO-led organization of around 200 leading businesses working together to accelerate the transition to a sustainable world. Our WBCSD membership gives us an opportunity to share knowledge with other top companies and work to integrate global value chains. Our Global CEO, Peter Oosterveer is also a member of the WBCSD Executive Committee.

Learn more about our work with WBCSD



# 

## 3: Good Health and Well-Being:

Promote health and well-being for people of all ages, everywhere in the world.

## 12: Responsible Consumption and Production:

Make sure that what we consume and produce is sustainable for people and the environment.



#### 15: Life on Land:

Protect and restore ecosystems, sustainably manage forests, combat desertification, reverse land degradation, and stop the loss of biodiversity.

## **Measuring Our Progress**

It's not enough to say that we are going to achieve these goals. We have to stay accountable to ourselves, our clients, and the rest of the world. Each year, we will disclose our sustainability performance in the following documents:

- 1. The Arcadis Annual Integrated Report (GRI Content Index)
- 2. CDP Climate Change Questionnaire
- 3. Sustainalytics Risk Rating Report
- 4. MSCI rating
- 5. Ecovadis rating
- 6. UN Global Compact Communication on Progress.

We will also develop a short list of non-financial KPIs that we will use to measure progress in achieving our strategy goals. These KPIs will be disclosed as part of our 2021 Annual Integrated report.

By the first quarter of 2022, we will also include information on our non-financial KPIs as part of our quarterly financial disclosures.

# Creating a more sustainable world

What it means to be sustainable and resilient has changed in our more than 130 years in business. What is constant, though, is that we continue to innovate new ways to make the world a better place through our projects. The following are just a few of those projects that illustrate the depth and breadth of our sustainable solutions and our passion for improving quality of life.



**3,000** virtually energy neutral homes

"Design and engineering can make sustainability a reality. In all of the work I do for clients, I'm constantly asking myself how to make sure the project is in balance with nature and respectful of local culture and history."

Marjolijn Versteegden Commercial Director

## **Utrecht's Vertical Forest**

When it comes to climate change, the stakes couldn't be higher. Cities planning for the future know that even our apartment buildings need to combat carbon emissions. The Wonderwoods in Utrecht is the first of its kind in the Netherlands—a pair of climate-adaptive, virtually energy-neutral residential towers that bring nature back to the city in a sustainable way.

Visually, the taller tower looks like a "vertical forest" with balconies and facades covered in plants, all of which absorb CO2 and produce oxygen—a source of cleaner, healthier air in the middle of the city. The 70- and 90-meter-high residential towers, which are connected by a walkway, house a mix of about 3,000 homes, Playlab (a cultural space), offices, healthy catering, fitness, yoga, small-scale shops and education space.

# Reducing Water Consumption in Mexico

Water scarcity is one of the biggest risks to humanity over the next decade. For clients like General Motors (GM), which has a manufacturing plant in the City of Silao, Mexico, water scarcity is a matter of survival: for their business their employees and the people living in that community. In line with the company's commitment to reduce water use across its operations by 15% by 2020, our experts conducted a water audit of the facility. We then took a holistic look at how to optimize and upgrade the on-site wastewater treatment plant, including a micro-bioreactor and a three-stage reverse osmosis system.

The facility now uses around 900,000 fewer liters (around 238,000 gallons) of water each day. That's more than 329 million liters (87,000,000 gallons) of water saved each year. These water savings also translate into fewer chemicals in the wastewater treatment process and energy savings for pumps, making GM and Silao that much more resilient.





## Making Doha's Water Supply More Secure

By 2030, the number of people living in Qatar is expected to increase by nearly 25% to 2.3 million. It has also become a tourist destination and will host the 2022 World Cup. These rapid demographic and economic changes have increased the urgency to improve the efficiency and capacity of public services like power and water and create a national strategic plan to safeguard Qatar's future.

Desalination plants are currently the country's main source of fresh water, but there is a limited supply of water in the system at any given time. Any disaster, whether natural or man-made, has the potential create a water crisis in the City of Doha. Qatar General Electricity & Water Corporation is working with Arcadis on a first-of-its-kind mega reservoir project. Together we have already delivered five interconnected sites that store seven full days of water, giving the people of Doha an efficient, secure, and flexible supply for the future. We're working to build another three sites by 2036.



## 66%

reduction in water use during excavation;

Green transport project = **lower** 

lower GHGs



## Sydney's Cutting-Edge Mobility

Futuristic transportation technology and comprehensive mobility plans can completely transform a city for the better. Sydney is committed to becoming a truly sustainable city of the future, with the first fully-automated metro rail system in Australia.

Our team is helping the city achieve its goal with eight new stations and twin 15km tunnels for Sydney Metro Northwest. With trains running every four minutes, the service will give people a viable, reliable alternative to driving in a region that has the highest car ownership per household in the state.

In line with Australia's commitment to the environment, our team reused 100% of the 4.3 million tons of crushed rock and excavated material generated from tunneling with a 66% reduction in water use. Once the project is complete, Sydney will have a transport system that can take the city decades into the future.

## Cleaning Up the World's Oceans

Thousands of marine animals die every year as a result of plastic pollution. This is also how microscopic plastic gets into the food cycle and ends up on our bodies as well. We partnered with Ocean Cleanup to do something about it.

The InterceptorTM project is part of Ocean Cleanup's plan to stop 80% of plastic from entering oceans within five years. The InterceptorTM is the first scalable solution to prevent plastic from entering the world's oceans from rivers. It's 100% solar-powered and extracts plastic autonomously

Our team initially partnered on the pilot project for the Klang River in Malaysia, with the intent to eventually tackle 1000 rivers around the world. The local team in Malaysia provided project management support and stakeholder management services, collaborating with Arcadis Singapore in providing a comprehensive Environmental Impact Assessment (EIA).

6 CLEAN WATER AND SANITATION

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



80% less plastic in waterways; 100%

solar powered 🚦



200,000 residents protected; 21,000 businesses protected



## Making New York City More Resilient

In 2012, Superstorm Sandy pummeled New York City and caused upwards of \$19 billion in damage. The devastation made it clear just how vulnerable the city is to the effects of rising sea levels and climate change, and just how badly the city needed a plan to prevent another storm from wreaking havoc.

In response to the storm, the US Department of Housing and Urban Development (HUD) held a competition to bring together the best and brightest ideas to protect the Northeast from the next big storm. Bjarke Ingels Group (BIG), Arcadis and other partners were selected as the winners for their concept: The BIG U, also known as the Dryline.

The vision for the BIG U is a protective, resilient system around Manhattan. The East Side Coastal Resiliency project is the first step in realizing that vision. Arcadis and our partners developed feasibility and conceptual design reports to provide flood protection and social infrastructure for 200,000 residents and 21,000 business in the area. The project also combines a range of multifunctional resilience solutions with neighborhood and community amenities to improve access to parks and recreational spaces.



# Hydrogen-Powered Living in the Netherlands

Arcadis and 20 other partners have joined the municipality of Hoogeveen to create the first hydrogen-based residential neighborhood in the Netherlands. Eighty new hydrogen-heated homes will pave the way for the conversion of 1,130 residences to hydrogen heating instead of natural gas. This neighborhood and the technology will become a blueprint for the future built environment in the Netherlands.

Under the project, the existing piping network will transport hydrogen while the central heating boilers will be replaced with hydrogen-powered ones. Arcadis is also responsible for the safety risk assessment and management and feasibility study on green hydrogen, focusing on its affordability and accessibility. Once completed, the project will enable Hoogeveen to contribute to the country's energy transition and serve a pioneering role toward the building of gas-free homes.

## Sustainable Logistics in Australia

Qube Holdings, Australia's largest logistics provider, needed a new logistics facility to drive their business forward over the next decades while minimizing effects on the surrounding environment. They turned to Arcadis for a comprehensive sustainability strategy for their Moorebank Logistics Park (MLP).

Our team implemented a range of carbon reduction measures across the 850,000-SM import-export terminal. The design reduces greenhouse gas emissions during construction and ongoing operations through solar photovoltaic and other energy efficiency solutions. We also built a carbon emissions model, showing the most efficient ways to transport freight.

Arcadis' sustainability strategy for the MLP is a leading example of how embedding sustainability into a project can create significant environmental and financial benefits. The MLP will cut freight truck emissions by more than 110,000 tons of CO2 per year, the equivalent of burning 52,000 tons of coal. The overall carbon impact of the MLP will be the equivalent of removing around 11,000 vehicles from the road for an entire year. Our work also helped support our client in securing 150 million dollars (AUD) in financing from the Australian Clean Energy Finance Corporation, which described the MLP as a model "...for the next generation in low emissions transport and freight facilities." <complex-block>

## **Rebuilding a Paris Icon**

In April of 2019, the entire world watched in shock as the iconic Notre-Dame Cathedral burned for hours. Many feared that the monument would be lost forever. Fortunately, the fire was eventually extinguished and experts across France mobilized to secure the structure and plan to rebuild it.

11 SUSTAINABLE CITTE AND COMMUNITIES

One of our own infrastructure engineers, Olivier de Châlus, happens to be an expert on Notre-Dame and was already a volunteer there before the fire. Olivier's deep knowledge of the cathedral has been invaluable for the rest of the Arcadis team helping to rebuild the most visited monument in France, ultimately protecting the city's extraordinary history and economy.



## Green Power from the North Sea

Located in the southern portion of the North Sea, the 714MW East Anglia One offshore wind farm will have 102 wind turbines that can deliver sustainable green energy to 500,000 households. The project's offshore construction started in 2018 and we expect it to be completed in 2020.

Arcadis provided commercial design, construction, and project management services for the different parts of the project. These services extended to environmental assessment, development consent order planning, grid connection engineering and program management.

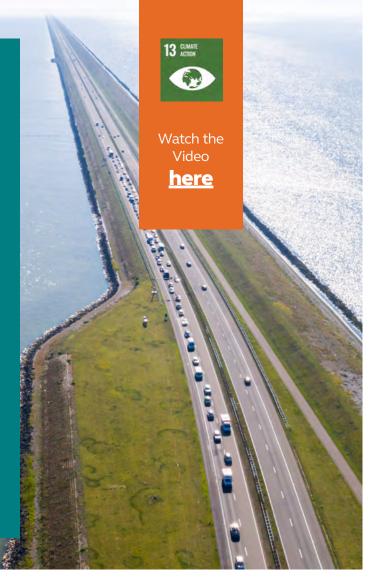
East Anglia One is part of the larger East Anglia Array, a series of offshore wind farms located 30 miles off the east coast of England. These projects are expected to comprise the East Anglia Hub that could provide a maximum capacity of 7.2GW.

# Engineering for Resilience in the Netherlands

The Afsluit Dike separating the IJsselmeer and the Wadden Sea has stood as a marvel of Dutch engineering since it was completed in 1932. The dam primarily takes care of the floodwaters from the Wadden Sea and drainage from the IJsselmeer, while also providing access between the provinces of North Holland and Friesland and shipping between the Wadden Sea and the IJsselmeer.

Due to rising sea levels and an increased need for discharge capacity, the dam must be strengthened. The Ministry of Public Works asked LEVVEL to design, build, finance and maintain a resilient solution for the future. Arcadis is part of the design team of LEVVEL.

The design raises the dam by about two meters over the course of 32 kilometers and widens the A7 highway. The project also incorporates one of the largest pumping stations in Europe and updates several hydraulic structures. The project aims to to mitigate impact on the environment with a fish migration river. The Ministry of Public Works (Rijkswaterstaat) and LEVVEL received a sustainability prize for this project and it is now an example for resilient development across the world.



## Restoring the Wetlands on the Louisiana Coast

100 TO 100 TO 100

Along the Louisiana coast, development has severely damaged the wetlands ecosystem. This deterioration makes resilience incredibly challenging for the wetlands habitat and for communities living in the area. As part of the Beneficial Use of Dredged Material (BUDMAT) program, Arcadis is using dredged material from the Mississippi River and its tributaries to restore the critical wetlands habitat and restore endangered geomorphic features that, in turn, will protect the wetlands in the future.

This is far from the first time Arcadis has worked in this region. In fact, we have a long-standing history of working on coastal protection in Louisiana, dating back to the flood mitigation work we did after Hurricane Katrina. In the BUDMAT project, we evaluated the feasibility and cost of alternative forms of dredging and sediment delivery in a complex and sensitive aquatic ecosystem. The project is intended to repair the damage to the area and create a more resilient future for the plants, animals and people who call it home.



Restored **500** foot-wide marsh platform

Restored 60 acres of marshes

"Transportation is a major contributor to emissions in cities all around the world. So, we must make urban mobility more sustainable if we ever hope to create pollution-free cities. Arcadis is working with clients to develop sustainable modes of transport and we're helping citizens shift their mobility behaviors toward more sustainable means."

Yuan Shi Global Solution Leader – New Mobility





35% increased capacity benefitting 1 million people

## Chile's Green, Reliable Transit

With more than two million passengers per day, Santiago's metro system is already one of the largest in South America. Arcadis has worked with the Santiago Metro for more than 15 years to expand the city's transportation system and stay a step ahead of population growth and traffic congestion.

Two new metro lines, 3 and 6, are currently under construction as part of the largest project in the metro's 50-year history. The two new lines will increase the network's capacity by 35% and benefit at least one million people. Arcadis is working as part of a consortium and is responsible for construction supervision on Line 3, as well as engineering consulting on both lines. Our long-standing relationship with the Santiago Metro has allowed us to leverage our knowledge and our global network of experts to reduce urban congestion and pollution for the people of Santiago.





Arcadis is the leading global Design & Consultancy firm for natural and built assets. Applying our deep market sector insights and collective design, consultancy, engineering, project and management services we work in partnership with our clients to deliver exceptional and sustainable outcomes throughout the lifecycle of their natural and built assets. We are 27,000 people, active in over 70 countries that generate  $\in$  3.3 billion in revenues. We support UN-Habitat with knowledge and expertise to improve the quality of life in rapidly growing cities around the world.

www.arcadis.com

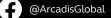
#### **Contact us**



**Grant Sprick** Global Sustainability Director E Grant.Sprick@arcadis.com

#### Arcadis. Improving quality of life









y

