



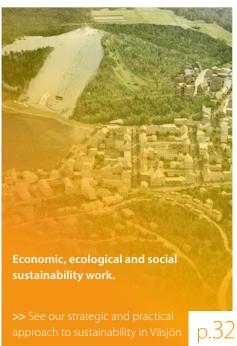




We renew society through innovative and sustainable solutions Sustainability is part of our business strategy

>> Find out more about our strategy and definition of sustainability

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Strengthened sustainability offering, Climate-KIC membership and new sustainability certifications that PE helped develop within the Sweden Green Building Council are some of the highlights of our sustainability work over the year.

>> Find out more about 2018 Sustainability Work Highlights

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# This is Projektengagemang

Projektengagemang, or PE as the company is generally known, comprises over one thousand architects, engineers, project managers and specialists who identify opportunities, develop concepts and tackle challenges. Together, we generate value for our clients and for society in general. We deliver solutions that work here and now; and for future generations. We create for life.

Founded in 2006, PE is a multidisciplinary consultancy group specialising in urban planning and industry. We have grown over the years and now employ over one thousand people, with a presence across the whole of Sweden. Revenue for 2018 totalled just over SEK 1.2 billion.

## A simple business concept

Many important building blocks; ideas, individuals and companies, have come together and laid the foundations for the strong company that is PE today. PE's committed employees are the group's driving force, creating value not just for our clients, but for society in general as well. We provide advanced consulting services and solutions in our four divisions: Architecture & Management, Civil Engineering & Infrastructure, Industry & Energy and Systems.

## Vision of a better society

In a world that is constantly changing, we need to change, too. We have a responsibility to make a difference, and we are spurred on by a desire to renew and improve. Our vision is for us to renew society through innovative and sustainable solutions. That is why we challenge one another to think more broadly – and sometimes differently. This helps develop our knowledge and our skills, and, by extension, how we create value for our clients, ourselves and society in general.

## Entrepreneurship and collaboration

We maintain a firm belief in entrepreneurship, and that our shared success is built on the personal drive of each and every employee. With our genuine commitment to the assignment, the client, the end user and society, we create successful projects where the client is delighted not only with the end result, but also with the process of getting there.

## Complex challenges demand innovative solutions

Our corporate culture encourages everyone to have an open attitude towards working across different disciplines. If we need to, we draw on different areas of expertise from our colleagues. Our projects are growing increasingly complex as the years go by, both within urban planning and industry, and more specialists with different skills need to work together to help resolve the challenges we face. By encouraging collaboration between our architects, engineers, project managers and specialists, we become more innovative and better at identifying synergy effects and solutions.

## A better workplace

Success is often measured in terms of profitable growth, but is generated based on employee and customer satisfaction, and ultimately the social benefit we contribute to people's everyday lives. Our most recent employee satisfaction survey shows a higher than average likelihood of PE employees recommending us as a workplace to a friend or colleague. We see this as evidence that we are on the right track.

We renew society through innovative and sustainable solutions

Vision

## **Architecture & Management**

Services within areas such as urban planning, architecture, landscape and interior architecture, water supply and sanitation, land, as well as project management and management consulting.

Proportion

Proportion

Proportion

Proportion

## **Civil Engineering & Infrastructure**

Services within areas such as building design, acoustics, geotechnics, energy, environment and sustainability, to bridge and plant design, railways, roads, water treatment and environmental impact.

## **Industry & Energy**

Services targeted at the industrial sector within areas such as strategic consulting, automation, product development, mechanical design, process and calculation services.

## Systems

Services within areas such as HVAC design, electrical and telecommunications engineering, safety, fire protection and sprinkler systems.

Four divisions



Revenue

\*Of which one office in Skien, Norway, and one in Chennai, India.

SEK million

We feel Our driving force is We take

Commitment Entrepreneurship Responsibility

Core values

## Interview with CEO Per Hedebäck

Projektengagemang continued to grow in 2018. Per Hedebäck is President and CEO and is also ultimately responsible for the Group's sustainability work.

## Per, how would you sum up 2018 from a sustainability point of view?

It's been a positive year for us. We constantly endeavour to contribute to a more sustainable future and I believe we have taken key steps towards being able to contribute more. The greatest difference we make is through the solutions we develop with our clients, and in 2018 we implemented approximately 10,000 projects for around 3,000 clients. It's together with our clients that we're building the communities, infrastructure and industry of tomorrow. In 2018 we also made a number of important investments in our organisation, we established a new sustainability strategy, launched a sustainability council, bolstered our HR organisation and worked extensively on our core values.

## What does your new sustainability strategy involve?

Sustainability is a strategic platform that should be reflected in everything we do. We have identified three areas in which we are working concertedly on sustainability. These are: through collaboration in society, in our business with our employees, and primarily by contributing our know-how in assignments. For us sustainability is a long-term, holistic issue, and we base our work on the UN Sustainable Development Goals. We're endeavouring to improve on all aspects of sustainability and continually measure outcomes to ensure we're moving in the right direction.

## Why have you established a sustainability council?

We've chosen to set up a sustainability council instead of having a head of sustainability to manage the complexity and breadth that sustainability entails. It makes our analyses more accurate and enables us to quickly implement the internal initiatives that are needed. In addition, I have ultimate responsible on the council and participate in all meetings, ensuring sustainability is higher up the agenda. Issues handled by the sustainability council cover everything from PE's client offering, sustainability expertise and social advocacy, to internal environmental issues, equality and business ethics.

Besides leading and coordinating the Group's day-to-day work with sustainability, the council also functions as a communication channel between employees and management. The goal is to boost PE's contribution to the establishment of a sustainable society.

## Would you say PE is involved in influencing public debate?

Most definitely. During the year, we participate in various forums, with our experts contributing their know-how. For some years now we have been members of the Sweden Green Building Council



(SGBC), in which we are participating in a number of initiatives relating to sustainable construction and certifications. We have participated as experts in parliamentary discussions about resource-efficient and circular plastics, we've held presentations and workshops for organisations such as Circular Sweden and IVA The Royal Swedish Academy of Engineering Sciences, and we've also participated in standardisation work at SIS Swedish Standards Institute, to mention just some of the things we've been involved in.

We have produced our Society Barometer report for the third year in a row. The theme for 2018 was cities of the future, and insights from the report back up our own knowledge, and we can share what we have learned with clients and other organisations in society. This had a huge impact in both the media and our industry in general.

## Why is PE involved with KVIST?

We founded KVIST in 2015 and have funded it since then. It's a network for female engineers and architects, and for us it's a way of increasing gender equality in our industry. We want to inspire and attract new women from a range of backgrounds, experiences and ethnicities into the urban planning sector by providing seminars that inspire, as well as student meet-ups and a mentoring programme. We know the industry has many more challenges with regard to equality, but this is one way for us to help.

## What are you most looking forward to in 2019?

I'm looking forward to seeing the impact of the long-term efforts we have made over the year both from a financial and a sustainability point of view. Personally, I have to also say that the work we are doing in the field of sustainability is both exciting and innovative. It's something I'm passionate about and one of the reasons I work in the urban planning industry. We really are involved in creating the communities of the future. We'll be continuing this work together in 2019 because that's how we can make a difference.

# PE's sustainability council

As part of efforts to achieve PE's vision of renewing society through innovative and sustainable solutions, PE established a sustainability council in November. Besides leading and coordinating the Group's day-to-day work with sustainability, the council also functions as a communication channel between employees and management. The goal is to boost PE's contribution to the establishment of a sustainable society.

The sustainability council's tasks include lobbying, acting as PE's external communicator for sustainability issues, business intelligence and identifying key issues for PE. The council's remit also extends to prioritising and managing the Group's sustainability work based on its sustainability strategy and materiality analysis.

Issues will cover everything from PE's client offering, sustainability expertise and social impact, to internal environmental issues, equality and business ethics. In order to ensure that the council exerts an influence, President and CEO Per Hedebäck is one of the members.

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We have chosen to have a sustainability council instead of a head of sustainability in order to be able to manage the complexity and breadth that sustainability entails for urban planning. It makes our analyses more accurate and enables us to quickly implement the internal initiatives that are needed

Per Hedebäck, President and CEO



Amanda Tevell Project Manager, Strategy & Business Development

**Per Hedebäck** President and CEO

**Åsa Holmgren** HR Director

Peter Stigson Group Manager Sustainable Society & Private Sector Development and Ph.D. in Energy & Environmental Technology

**Sofia Wollmann** Quality and Environment Director

# 2018 Sustainability work highlights

## Working with plastics in the building industry

In recent years, there has been growing attention in Sweden and internationally on environmental problems with the use of plastic, concerning issues such as littering and microplastics in the oceans. In addition to plastics containing potentially hazardous and environmentally harmful substances, plastics could result in a number of negative consequences for humans, animals and the natural environment. At the same time, plastic plays a key role in a sustainable society, for example as packaging material and in lightweight designs.

In 2018, PE conducted an analysis of research studies and industry data, and interviewed key figures in the construction industry. The analysis showed that the issue of plastics is complex. Our analysis of flows of plastic in Sweden revealed that levels of plastic recycling in the construction industry are relatively low. One of our conclusions was therefore that we need to improve our knowledge of plastics, so that the right plastic is used in the right place, or if appropriate, is not used at all. Our next step is to establish a framework to increase plastic recycling from dismantling work and waste management, along with a planning methodology for a conscious choice of materials to be used in our projects.

Examples of measures taken as part of PE's sustainability approach:

- 3 Contribution to sustainability through our assignments
- 5 Expertise in sustainability

**Primary Sustainable** Development Goals:





(targets 8.4, 12.2, 12.4)

Secondary Sustainable **Development Goals:** 









## Resource efficiency and circular economy

Resource efficiency and a circular economy were highlighted as being important to the sustainable development of society in PE's 2017 Sustainability Report. This is in order to cope with a future with an increased population, urbanisation, economic development and other megatrends. In 2018, PE conducted further analysis, focusing on how we can contribute to better use of the resources that already exist in society. One of the conclusions of this analysis is that we have a major impact via the goods, services and recommendations that we include in our advice to clients in the early life cycle stage of buildings and industrial processes.

In addition, PE also participated in a number of conferences, seminars and workshops to exchange knowledge with clients, partners and other social actors. We gave presentations to the Circular Sweden business initiative and Swedish Recycling Industries' Association, and compiled consultation comments on political initiatives. For 2019 we aim to further strengthen our know-how and use it to contribute to resource efficiency together with our clients. As part of this process, we are cooperating with IVA, The Royal Swedish Academy of Engineering Sciences and working on a Swedish agenda for resource efficiency and the circular economy in Sweden.

Examples of measures taken as part of PE's sustainability approach:

1 Social impact and analysis 3 Contribution to sustainability through our assignments

**Primary Sustainable** 















(targets 8.4, 9.4, 12.2)





At the request of the Nordic Council of Ministers and Climate-KIC, PE has analysed the timber construction value chain and how it may support and conflict with the UN Sustainable Development Goals (SDGs). This is based on an understanding that a growing interest in timber construction and the implementation of the SDGs are two parallel trends. The aim is therefore to identify the key points for a Nordic and national agenda to increase sustainability in the development of society towards

















## Stronger HR capacity

During the year we enhanced conditions and benefits within the Group. PE has always followed the terms regulated in the collective agreement and this started to be formally introduced in 2017. All companies signing up to collective agreements provides greater job security for our employees and is part of building a group-wide structure and set of values and having shared terms and benefits.

Our HR organisation was strengthened in 2018 through the recruitment of a new HR Director and HR Business Partners for each division. Our HR Business Partners provide operational and strategic support for managers, and are vital to us achieving our ambition of being the best place to work.

Examples of measures taken as part of PE's sustainability approach:



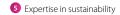


## PE strengthens offering in strategic sustainability work

In order to broaden and further strengthen our sustainability capabilities, we recruited Peter Stigson, PhD in Energy and Environmental Engineering, as Team Manager for a team working with strategic and applied sustainability. He has experience of working on assignments for government agencies, trade associations and companies in a range of social sectors.

The group brings together sustainability strategists working on a long-term basis with sustainability. This includes the development of sustainable properties and areas, sustainable development of society, strategic analysis, resource efficiency and the circular economy. The group is now being developed through recruitment and projects on national and environmental economy, as well as social sustainability. This will enable PE to take a broader approach to our clients' position on development of sustainability.

Examples of measures taken as part of PE's sustainability approach:

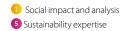


## Sweden Green Building Council NollCO2 certification

The construction and property sector has succeeded in reducing buildings' energy consumption during the operating phase. There is a real need for more work on the environmental impact of construction materials and the construction process, which is currently often as great as the impact of energy used in the operation of a building. That's why Sweden Green Building Council (SGBC) is developing 'NollCO2', which is a supplementary certification for climate-neutral buildings. NollCO2 allows greenhouse gas emissions from the built environment to be minimised by encouraging both energy and resource efficiency and renewable energy production. The aim is net zero emissions over the life cycle of a building. NollCO2 is also part of the World Green Building Council project Advancing Net Zero. The first version of NollCO2 is a pilot version with testing of certification, after which it will be launched as version 1.0 in 2019.

During the year, PE participated in the technical council for the certification through Per Levin, Senior Lecturer in Construction Engineering and Pia Stoll, PhD in Industrial Ecology. The technical council is responsible for issues of interpreting texts for the pilot project handbook, defines where there is still insufficient knowledge and identifies what reviews are required.

Examples of measures taken as part of PE's sustainability approach:





**Primary Sustainable Development Goals:** 





(targets 7.1, 7.2, 7.3, 9.4)

Secondary Sustainable **Development Goals:** 





## Business ethics and anti-corruption

Our business ethics work in 2018 was given the stamp of approval as we passed the demanding process to be listed on NASDAQ. Policies to combat corruption and other irregularities have been updated and distributed to managers and employees in our organisation. During the year we also introduced an external system for our whistleblower function. Our aim in 2019 is to make this even more accessible for employees, clients and suppliers.

Examples of measures taken as part of PE's sustainability approach:



## PE member of Climate-KIC.

In 2018, PE became a member of Climate-KIC, the largest organisation in the EU for public-private cooperation. The organisation supports research and innovation in the field of climate, including resource efficiency, green industries and green financial instruments. This gives us an opportunity to strengthen our innovation agenda, cooperate with public and private operators in meeting new challenges and developing solutions and collaborating with strong European organisations on the sustainable development of society.

PE is working within Climate-KIC on projects concerning nature-based climate adaptation, green urban development, water-efficient property solutions, the timber frame construction value chain and its contribution, and conflicts with the UN Sustainable Development Goals. This has resulted in participation and presentations of results at UN climate meetings.

Examples of measures taken as part of PE's sustainability approach:

1 Social impact and analysis 4 Employee sustainability capabilities

## Hand in Hand – our contribution to female entrepreneurship

For the third consecutive year, PE has chosen to support Hand in Hand, an organisation that helps people escape from poverty by training women in entrepreneurship. This year we donated money to the project Jobs for Zimbabwe! which will result in 270 women and young people receiving training so they can then start sustainable businesses. 315 new jobs are being created, mostly in farming, forestry, tree planting, livestock management, beekeeping, retail and handicrafts. In addition, the lives of 1,000 children will be improved by ensuring food on the table, medical care and regular school attendance.

Examples of measures taken as part of PE's sustainability approach:

Social impact and analysis

## Sustainable Property and new sustainability concepts

The need for sustainable solutions is growing as the complexities and requirements of systematic sustainability work increase. So in 2018 PE began the process of packaging its sustainability services. This is a way for us to boost client value by gathering together our combined sustainability expertise as urban planning consultants. One of the results of this was Sustainable Property.

Sustainable Property is a tool that holistically and efficiently helps property owners chart sustainability-related work in their property holdings so they can take the right decisions for the long term. Based on the Sustainable Development Goals, possible measures are identified according to estimated investment and assessed sustainability impact using a smart algorithm.

Sustainable Property was launched in November and has generated significant interest among clients and industry media. This approach has also increased own our internal cooperation and has helped boost capabilities and awareness of what sustainability measures are effective in developing more sustainable properties.

During the year PE also developed a method for working with sustainability in large construction projects, called Sustainable Projects. Our interior architects have also developed two concepts; The Sustainable Office and Sustainability Coach, which are mainly aimed at tenants and office projects. We will be continuing our efforts to package our sustainability services in 2019.

Examples of measures taken as part of PE's sustainability approach:

- 3 Contribution to sustainability through our assignments
- 4 Employee sustainability capabilities

Primary Sustainable **Development Goals:** 



(target 11.3)

Secondary Sustainable **Development Goals:** 











## Correct energy consumption

Skanska has developed a sustainable district with offices and housing by the Mölndal River in Gothenburg. The office buildings have received Green Building and LEED Gold certification, and PE's task was to ensure that the estimated energy performance was achieved. Discussions took place in regular operating and energy meetings during the warranty period, with the involvement of PE, property owners and managers and operators. This was done in order to take quick and effective decisions on action and deviations in the functioning and energy performance of the properties.

**Project name** Tändstickan 2, Gothenburg

**Client:** Skanska Fastigheter Göteborg

Project timetable: 2016–2018

 $\textbf{Capabilities:} \ \textbf{Energy, environment and sustainability}$ 

Primary Sustainable Development Goals:



(taraet 7.3

Secondary Sustainable Development Goals:









## Society Barometer supports our sustainability work

The Society Barometer is PE's annual study in which 3,000 Swedes express their views and help us better understand citizens' views on sustainability, development of society and new technology. It's important for us to understand how society is developing and what role we as a business and consultancy can have in this development. The theme for 2018, city of the future, highlighted long-term challenges and opportunities in the development of our urban environments. Key focal areas were greener urban environments, more flexible forms of housing and work and for new technology to be used to free up communal spaces and resources to create more sustainable urban environments.

Using insights from the Social Barometer and by engaging with our clients, we have expanded our sustainability capabilities and given back our know-how in a number of lectures aimed at students, industry operators and citizens. In 2019 we will be intensifying our focus on sustainable cities and examining how far we have come and what measures have the greatest impact in the short term.

Examples of measures taken as part of PE's sustainability approach:



## PE contributes to sustainable districts

PE is working on sustainable support in town and city district projects in which PE's roles includes supporting capabilities and processes, reviewing how operators meeting sustainability requirements, designing grant applications and developing competence programmes for building operators and municipal officers. This work will make for more sustainable districts in the future.

PE has exchanged know-how with other operators by participating in the development of SGBC's Citylab certification for completed districts in 2018. PE has also certified employees for Citylab's planning stage Citylab aims to create districts in which neighbourhoods have been planned with consideration of national goals and the UN Sustainable Development Goals. Citylab comprises four elements; Citylab Guide, Citylab Certification, Citylab Networks and training. Together, these early and later stages encompass the groups of actors involved in area development. The structured approach taken by Citylab makes it easier for participants to work across operating boundaries, providing a joined-up approach.

Examples of measures taken as part of PE's sustainability approach:

- 3 Contribution to sustainability through our assignments
- 4 Employee sustainability capabilities

**Primary Sustainable Development Goals:** 



(targets 11.2, 11.3, 11.6, 11.7)

**Secondary Sustainable Development Goals:** 









# Sustainability – part of our business strategy

During the year we have clarified and built on our values, our strategy and our vision in our strategic PE House. Sustainability is now an integral part of our vision and has become a strategic foundation that will be reflected in everything we do.

## We renew society through innovative and sustainable solutions

We endeavour to contribute to a more sustainable future. We do this mainly through the solutions we develop with our clients. Together we are building the communities, infrastructure and industry of tomorrow. This demands an innovative and bold approach to encourage us to do things differently. Innovation is a prerequisite for sustainable development, as effective measures need to be adapted to varying conditions and continual technical and social advances.

## Sustainability – a strategic platform

We work with sustainability in three ways: through collaboration in society, in our business with our employees and primarily by contributing our know-how in assignments. Economic, environmental and social perspectives permeate this work. We work with a number of topics that together comprise our definition of sustainability. This is in order to be specific and at the same time enable us to manage sustainable development as a system issue.

# We renew society through innovative and sustainable solutions



We can and will contribute to constructing a sustainable society. We take responsibility for the future in cooperation with our stakeholders



We are passionate about helping our clients make more sustainable choices. In our assignments, we contribute innovative and sustainable solutions.



We live and learn. We understand the value in taking a long-term approach to working with sustainability in our business and are constantly seeking ways to improve.

## Collaboration in society

We can and will contribute to constructing a sustainable society. We take responsibility for the future in cooperation with our stakeholders. This supports our vision of renewing our society through innovative and sustainable solutions and also having a direct link to the strategic basis of active cooperation.

1

Social impact and analysis

**Material topic** 

Transparency and stakeholder engagement

How we interact with actors in society, pursue social advocacy and share insights. This topic also contains our business intelligence and analysis, which contribute to developing our business and, in the longer term, contributing to a more sustainable PE.

We achieve this, for example, through industry associations, external initiatives and cooperation with the Royal Swedish Academy of Engineering Sciences. Each year we also publish our Society Barometer, which highlights what Swedes think about sustainability, the development of society and new technology. In addition, we have consultants who work with sustainable development of society through policy analysis and cross-societal measures on developing agendas for policy development.

## External initiatives supported and contributed to by PE:

- KVIST, is a network for female engineers and architects that aims to inspire students and professional women to share their experiences and make new business contacts. The long-term goal is to encourage more women to apply to work in the industry. KVIST was founded in 2015 at PE's initiative.
- PE's consultants contribute as guest lecturers and supervisors at institutions including KTH Royal Institute of Technology, Chalmers University of Technology, Campus Nyköping, Newton, Hermods, Plushögskolan and INSU (previously known as IUC).
- Several initiatives as part of our membership of Climate-KIC.
- Initiative for a Swedish agenda for resource-efficient plastics management through IVA, The Royal Swedish Academy of Engineering Sciences

## Membership of industry organisations

- · Sweden Green Building Council, SGBC
- · Climate-KIC.
- IQ Samhällsbyggnad, IQS
- 100Gruppen
- The Federation of Swedish Engineering and Design Companies, now the Federation of Swedish Innovation Companies

Transparency in our reporting and openness to our stakeholders' expectations. We have two main tools for this; regular stakeholder engagement and an annual sustainability report. Our sustainability report complies with GRI (Global Reporting Initiative) guidelines. The report helps provide a straightforward overview of our improvements, and challenges us constantly to do better.

## Stakeholder engagement and analysis

Our stakeholders are people and groups on whom we depend to be able to achieve our goals. We are undertaking a stakeholder analysis for the Group regarding overall prioritisation of our sustainability work, and for our business systems to capture the needs and expectations that our stakeholders have. The stakeholder analysis provides a vital basis for the priorities we set and is one of the elements of our materiality analysis.

Engagement with each stakeholder group takes place in different ways. We aim to move away from the stakeholder analysis we have conducted based on our interpretation of documentation from stakeholders to more ongoing, structured engagement with our identified stakeholder groups.

Owners: Board seminar, interviews

Employees: Employee survey, in-house dialogue forum

**Clients:** Client survey, ongoing dialogue in assignments, interviews with our largest clients

**Society:** Interpretation based on the Society Barometer, interviews with citizen groups in society, brand survey

Financiers/bank: Dialogue with our main financiers

**Cooperation partners:** Engagement with our cooperation partners:

Media and stakeholder organisations: Business intelligence

**State and government agencies:** Dialogue with relevant lawmakers

## Know-how and assignments

We are passionate about helping our clients make more sustainable choices. In our assignments, we contribute innovative and sustainable solutions. This supports our business strategies of greatest client value and profitable growth, and contributes to our vision of renewing society through innovative and sustainable solutions.



Contribution to sustainability through our assignments

Material topic

Employee sustainability capabilities

Material topic

As a provider of urban planning services we have a central role in the cooperation between various actors and consequently have a significant opportunity to contribute to sustainable development of society. Our aim is to actively encourage our clients to make positive progress on sustainability. In measuring the outcome of our contribution to sustainability we have chosen to relate to the UN Sustainable Development Goals. This work was overseen by our sustainability council

This mainly concerns how our consultants use their sustainability capabilities day to day as architects, engineers and specialists. We offer training to develop capabilities and our aim is for all PE employees to receive relevant training. This work is overseen by the sustainability council in cooperation with the PE School, our in-house employee development platform.



## Expertise in sustainability

PE has expertise in strategic and operational issues on energy, the environment, risk and sustainability in buildings, city districts and organisations. We also make use of our sustainability experts to provide in-house support of both professional development and business development.

#### Societal analysis and strategies for sustainable development

- · Sustainable development of society
- Sustainable development of areas
- · National and environmental economy
- · Resource efficiency and circular

#### Environment, energy and sustainability services for buildings

- · Environment: Coordination, certification, management, strategy, inventory and description
- Interior environment: Reviews, validation and compulsory ventilation
- · Energy; Simulations, analysis, management and coordination
- Sustainability; Reporting, coordination and programmes. LCC, LCA and EPD

#### Environmental services - contaminated areas

· EIAs for different plans and activities (in industry, construction projects, infrastructure and mining)

- · Permit and application cases in accordance with environmental legislation
- Review of action taken
- Environmental consulting and environmental audits (due diligence phase 1 and 2)
- · Geological mapping and drill core logging
- GIS solutions

## Architectural sustainability services

- · Interior architecture
- Landscape architecture
- · Urban construction

## **Sustainable Property**

A tool for property owners to understand the current status clearly and in detail, and opportunities to develop more sustainable property holdings.

## Quality management

For the services we sell and provide, we endeavour to ensure client satisfaction and ideally exceed expectations. We take a systematic approach to making continuous improvements so that we are constantly developing. We do so through ongoing improvement and deviation management both in our business processes and in the assignments we carry out.

Our awareness and capabilities in the field of sustainability are

key to our ability to contribute to a more sustainable society.

A risk audit is compiled each guarter for the Board and once a year management holds a review in which the Group management and divisions analyse the reliability of the business system. External and internal audits are planned in three-year cycles to ensure that all businesses and locations are covered in a reasonable manner. These plans are updated annually.

We are certified to and base our quality management systems on the ISO 9001:2015 standard.

## Operations and employees

We live and learn. We understand the value in taking a long-term approach to working with sustainability in our business and are constantly seeking ways to improve. Our sustainability work in our own organisation supports our business strategy of being the best place to work and contributing to the strategic basis of business optimisation and strengthening our cultural DNA.

## 7 Environmental management

Our environmental impact from business activities, including carbon footprint and energy and resource consumption. Environmental management is guided by our sustainability policy, environmental management process and office policy, as well as our employee handbook's section on our travel and car policy. We are certified to and base our environmental management system on the ISO 14001:2015 standard.

We have chosen to relate our environmental management measures to Sweden's environmental quality targets, in which we prioritise; a limited carbon footprint, a toxin-free environment, a good built environment and rich flora and fauna. We measure direct and indirect CO<sub>2</sub> emissions, Scope 1 + 2, and greenhouse gas emissions intensity (see Sustainability Targets and Outcomes).



## 8 Employee wellbeing

Material topic

How we ensure a good work environment, health and professional development for our employees. This includes security, safety, professional development opportunities, benefits and work environment. This work is undertaken within the personnel process under the management of our HR organisation.

Issues regarding social factors and personnel are managed through our work environment policy, work environment and personnel handbook and our systematic fire safety measures. We monitor results through sickness absence, health and safety. We also track the number of cases of discrimination and action taken (see Sustainability Targets and Outcomes).



## 9 Equality

Material topic

How we work with gender equality, diversity and create equal opportunities for everyone. This is described in our code of conduct and is managed through our gender equality and diversity policy and our policy against discriminatory treatment. The focus of our development work is mainly on gender equality. We measure this by such means as gender balance on the Board, in management and among other employees (see Sustainability Targets and Outcomes).

Equality-related measures are an important component of our corporate culture efforts, which involves the contribution of all PE employees and managers. This work begins at Board level, where our diversity policy is applied, and spans to individual employees.



## 10 Business ethics

Our code of conduct contains guidelines on how we should operate our business in an ethical and socially correct way. The code contains guidelines on; corporate culture, business ethics, principles and employee rights, ethics and morals, unauthorised influence, corruption, reporting of irregularities, health and safety, communication and privacy, gender equality, diversity and discrimination, as well as relationships in society. To ensure compliance with the code of conduct, in which anticorruption measures are a key aspect, we measure communication and training on anticorruption policies (see Sustainability Targets and Outcomes).

We have an external whistleblower function available, allowing employees to make an anonymous report if they suspect serious irregularities or anomalies in the company. The function is available to everyone and is described on our intranet. Our business ethics work is monitored by the sustainability council.

Our financial stability and our financial earnings create long-term value for our stakeholders. Our heads of division are ultimately responsible for the earnings of their respective division. Monitoring of earnings performance takes place on a monthly basis under the management of the Chief Financial Officer.

Our financial targets are a growth rate of 15% over a business cycle and an EBITA margin of 8%. We report economic value generated and distributed (see Sustainability Targets and Outcomes).

How we work proactively with issues of safety and preparedness in our business to ensure continuity. This work is led by our safety manager and each division has a contingency plan in place.

## Responsible supply chain

How we take responsibility for our supply chain, including through supplier reviews, purchasing and life cycle-based monitoring. This is regulated by our supplier code of conduct policy, for which our aim is for all our critical suppliers to approve.

## PE's life cycle

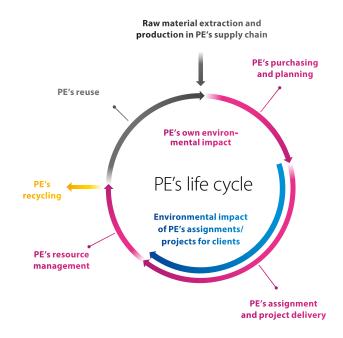
PE's life cycle starts with our suppliers' production of the goods and services that we purchase. Suppliers in turn purchase raw materials for their production; raw materials that have been extracted in various ways. It is consequently important that PE review suppliers and that these suppliers comply with our supplier code of conduct, which specifies guidelines for environmental and health and safety considerations.

PE then manages purchasing, transportation and installation of goods and services. We can choose which goods and services we purchase and whether we want to purchase local products and how these should be installed and used. These choices are made in line with our office policy.

This is followed by the usage phase, when PE uses electricity, heat, cooling, transportation and interior details. The largest negative environmental impact of PE's activities is in this phase – our business travel. However, this phase also contains our largest positive environmental impact – our contribution to our clients' environmental performance.

In the next phase, PE manages used resources, which largely consist of cardboard, paper and household waste from the office kitchen. Computers and screens are leased and are therefore

managed as resources to be reused. PE sorts its waste, which helps ensure it can be recycled in the final phase of the life cycle. We ensure compliance with the Waste Regulation by means of legislation compliance checks.





Norrtälje municipality is creating a new district with a focus on sustainability in the previous industrial port area that will be the site for 2,000 new homes. PE was awarded the assignment to project manage the extensive decontamination of pollution in the area. Our assignment also includes remediation of contaminated land, which is the main environmental issue in this project.

Norrtälje Hamn is largely constructed out to sea, where different types of waste have been used as filler material. The area has also been used for a long period by a large number of industries and other environmentally hazardous activities. The filler material and these activities have resulted in significant contamination. Norrtälje municipality consequently needed help with remediation of contaminated land, decontamination, environmental issues and permit issues regarding water-based operations when starting the construction of housing in the former industrial port area. That's where PE comes in.

PE's task mainly involves providing project management, along with expert support in environmental and permit issues. We are ensuring that remediation and other environmental issues in the construction projects are taken forward while ensuring quality, efficiency and respect for the project's timetables, budget and other processes.

Implementation of the remediation work in public spaces such as municipally owned district land is currently being undertaken in a partnering arrangement. This work is taking place in stages, with multiple stages progressing parallel with each other. As it is a large, complex area that is integrated with the existing city, there are ongoing needs for both the project and the city. We are therefore working closely with the contractor and designated developers, and have overall responsibility for communication with the supervisory authority and other relevant agencies.

## A sustainable process

We are ensuring that the documentation being produced is correct, optimising the benefit generated and ensuring all work is carried out in accordance with the documentation so that the housing project is environmentally sustainable and the area is used as a housing area without risk to human health. We are also ensuring the best for the project from the municipality's point of view in terms of environmental quality, project finances and timetables, and that sustainability targets and the aims for the district can be achieved.

The work is guided by the needs of the project with regard to the environment, and we are therefore identifying needs and initiating the necessary measures if required. This can involve anything from evaluations, improvement work, checks and risk assessment to coordination, documentation, quality assurance and communication.



# Care for the long-term wellbeing of people and the environment is key

## Interview with environmental project manager Anders Attelind

#### What does an environmental project manager do?

As a environmental project manager in the Norrtälje Hamn project I represent the municipality on environmental issues in the partnering arrangement the municipality has with NCC. These environmental issues may relate to public spaces, appropriate construction work and decontamination. I also ensure that the contractor complies with the terms of the water rights court ruling regarding construction in water and carry out some sampling for the municipality. We're currently undertaking project planning, including trials regarding the drainage of dredged material prior to another permit application for water-based operations.

In short, I oversee that work is carried out as correctly and effectively as possible. The form of cooperation for the contracting also provides scope to jointly develop and optimise this work over time. The aim is to keep project costs down and for the project to be sustainable from an environmental point of view. The municipality also sets extensive sustainability requirements for its contractors.

## How do we and the client manage sustainability issues in the project?

All of Norrtälje Hamn is being planned with an explicit focus on sustainability. Care for the long-term wellbeing of people and the environment is key in the development of the new district. The aim is for economic, social and ecological sustainability to be reflected throughout planning and implementation. The project has some 40 project-specific sustainability targets linked to the 17 focal areas included in the Citylab system.

## Is the client satisfied with how we're conducting our assignment?

Yes, the Norrtälje Hamn project management are reassured by our capabilities, analytical ability and responsibility for leading and developing the issue of remediation and supporting the rest of project management to take the project forward.



# Management of sustainability work

Sustainability is an integral aspect of PE's group strategy and corporate governance, with our President and CEO having ultimate responsibility. He is supported by the sustainability council, which guides and coordinates this work.

The Group's corporate governance is based on Swedish legislation and the Articles of Association, as well as other relevant laws and regulations. Governance is exercised via the AGM, the Board of Directors and Chief Executive Officer in accordance with the Companies Act, the Articles of Association and the Swedish Corporate Governance Code.

PE's overall goal is to generate long-term value for our stakeholders. Effective corporate governance is a prerequisite for this, and it is characterised by an efficient organisational structure, internal control and risk management systems and transparency. PE applies most of the rules included in the Swedish Corporate Governance Code. Any deviations from the Code are detailed in PE's annual report.

PE's policies are guided by the procedure set out in our Policy Hierarchy. This hierarchy is divided according to policies and guideline documents, determined by the Board, the President and CEO who participates on the Board, and other policies and guideline documents determined by the President and CEO or designated function. The policies are updated at least annually in conjunction with the constitutive Board meeting or as required.

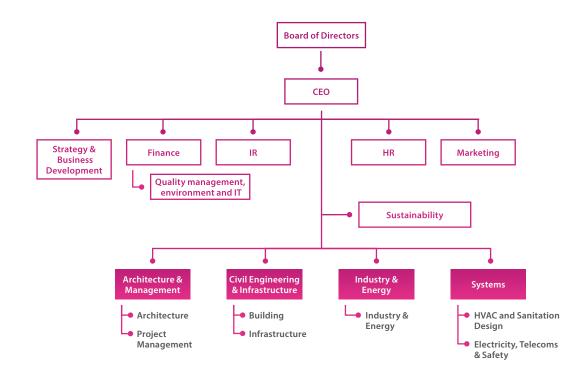
## Key organisational changes during the year

PE is growing rapidly and the organisational structure is adapting accordingly. In 2018 the divisional structure was further clarified and the Project Management business area was moved to the division now called Architecture & Management.

Strategy & Business Development has been established as a Group function with a head of strategy reporting directly to the CEO. The Group is responsible for group-wide initiatives and projects, drawing up and monitoring business plans and actively supporting the organisation with analysis, business development and change management.

The quality management function has been given greater responsibility for environmental management and is now responsible for both our ISO certifications, ISO 9001 and 14001. The heads of quality management and environment are supported by a quality management and environment coordinator for each business area, supporting compliance and implementation.

Since November 2018 sustainability work has been led by a



sustainability council in which the former head of sustainability is a member together with the HR Director, head of quality management and environment, head of strategic programme and business development, a sustainability strategist from the core business and the President and CEO. The sustainability council's tasks are prioritising and managing sustainability work, ensuring ongoing engagement with PE's stakeholders, annually implementing a materiality analysis and producing a sustainability report, supporting other PE functions within sustainability capabilities, and pursuing advocacy work and business intelligence.

You can find out about the sustainability council on page 7.

## Assessment of sustainability management

Sustainability management includes all sustainability topics and material sustainability topics if nothing else is stated. Major changes were implemented during the year as sustainability became a material topic of the new business strategy. We performed one materiality analysis in 2018, compared with two in 2017. We have identified 13 sustainability topics that include our previous binding requirements and strategic issues. We have also clarified the scope and governance of various aspects of sustainability:

## Sustainability topics 1-2

Scope: PE and our stakeholders.

Work takes place in cooperation with actors in society.

## Sustainability topics 3-6

Scope: PE and our clients.

This work takes place in assignments together with our clients.

## Sustainability topics 7-13

Scope: PE, internal.

This work takes place in our internal processes and is supported by designated functions within the organisation.

We continually measure the outcome of this work in order to assess and adjust management. This includes asking clients and other stakeholders about their view of our sustainability work.

The formation of the sustainability council has also resulted in a significant change in how sustainability is managed within the Group. The aim is to link sustainability work in the Group more clearly and support the divisions in this work. The role of the sustainability council is to take overall strategic responsibility for all aspects of sustainability.

## Binding requirements

Our business is guided by a number of requirements from our stakeholders that we have to meet. This may involve legal requirements, but also aspects that we must ensure to continue operating our business. We have established a solid platform from which to meet these requirements in an appropriate manner. We have a business system that is fully compliant with ISO 9001:2015 and 14001:2015, which is subject to external review annually. We view this as a good way of verifying our work in this field.

Binding environmental requirements are handled within the environmental management process, under which we commit to undertake an energy audit, legislation compliance review for waste management, and a supplier assessment of our critical suppliers.

Binding requirements related to social factors and personnel concern gender equality, employee work environment including health and safety, and training opportunities, which are subject to work environment legislation. As an employer we also have a responsibility regarding work adaptation and rehabilitation issues.

Our code of conduct requires us to comply with the code of ethics established by FIDIC\* to respect basic human rights and operate in line with the UN declaration on human rights, ILO's\*\* core conventions and the UN convention on the rights of the child.

Combating corruption and irregularities is regulated by our code of conduct and implemented in part through our work environment training.

<sup>\*</sup>International Federation of Consulting Engineers

<sup>\*\*</sup>International Labour Organisation

# PE's contribution to the UN Sustainable Development Goals

Together with our clients, we have a great responsibility to build sustainable communities. In the thousands of projects we carry out each year, we contribute our capabilities to the UN Sustainable Development Goals

The requirements involved in creating a sustainable society in a sustainable world have long been vague. The UN's 2030 Agenda contains clear guidelines in the form of the Global Sustainable Development Goals (SDGs). Sweden has adopted these goals along with the rest of the world's nations and is therefore bound by them to work towards their fulfilment. Information about the goals has been widely disseminated in both the public and private sectors, and PE uses them as a starting point in its sustainability work. We do this partly to contribute towards individual goals within various services, but also in overall strategic

sustainability services that cover all the goals at the same time. The latter is important in identifying and managing the synergies and goal conflicts that exist via numerous links between the various goals and their targets. We try wherever possible to identify opportunities to make positive contributions to the goals and not just minimise our negative impact.

Below we provide more details of our contributions to both overall goals and their targets. This is not comprehensive but provides some examples of how we actually contribute to the Sustainable Development Goals through our business.



Good health is a basic requirement for people's ability to achieve their full potential and contribute to the development of society. Investment in health, for example through healthcare systems, is a reinvestment in the general development of society. In addition, the best possible health, including necessary health care, food, water, clean air, sanitation, hygiene and medication, are basic rights.

PE contributes to **target 3.9** "By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination".

We achieve this in part through the advice we provide which reduces the use of hazardous chemicals and increases the use of electricity from renewable sources, requires approved materials and products, as well as our work to improve the interior environment in buildings in our assignments.

**Examples of projects:** Extremely clean air | **Client:** Skanska and Sweco/ÅF



Gender equality is a goal in itself and essential for sustainable and peaceful development. Gender equality is achieved when women, men, girls and boys have equal rights, conditions, opportunities and power to shape their own lives and contribute to the development of society. This involves fair distribution of power, influence and resources in society.

PE contributes to **target 5.1** "End all forms of discrimination against all women and girls everywhere" and **target 5.5** "Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic, and public life".

We do this both through our own values and how we work with them within the company and in projects.

Our policy on diversity and gender equality ensures that all employees understand PE's approach. We also work with gender equality through external networks and in construction projects. You can find out more about this work under sustainability topic Equality.

**Examples of projects:** KVIST (kvist.se)



PE's contribution to SDG 6

## Clean Water and Sanitation

Water is essential for all life on Earth and is therefore essential for sustainable development. Water is also vital for global food production and energy generation.

The target to which we make the greatest contribution in this regard is **6.3** "By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally" and **target 6.4** "By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity."

Our positive contributions mainly take place through our assignments in landscaping, blue green nature-based solutions, water purification, analysis of soil contamination, geotechnical surveys and HVAC. By using natural infiltration on property land we can significantly increase the reuse of surface water locally and stimulate local ecosystems, which relieve surface water networks. This requires fewer chemicals and energy to purify water in water treatment plants.

**Examples of projects:** Advanced purification methods for wastewater in Riyadh, Saudi Arabia | **Client:** Suido Kiko Middle East



PE's contribution to SDG 7

## Affordable and Clean Energy

Economic development today is very strongly linked to energy needs and increased greenhouse gas emissions. Although this link needs to be broken, Sweden has a large percentage of energy-intensive primary industry and is a sparsely populated country with significant transport needs.

Through our assignments we contribute to **target 7.1** "Ensure universal access to affordable, reliable and modern energy services", **target 7.2** "Increase substantially the share of renewable energy in the global energy mix" and **target 7.3** "Double the global rate of improvement in energy efficiency".

This contribution is made through a number of our services. For example, in the development of renewable energy technology and facilities and energy efficiency improvements, property development and certification assignments, as well as charging infrastructure for electric vehicles.

**Examples of projects:** Correct energy consumption | **Client:** Skanska Fastigheter Göteborg



PE's contribution to SDG 9

## Industry, Innovation and Infrastructure

Sustainable industrial development is hugely important now that the Earth's planetary limits have been exceeded in four areas and we have to meet or social needs in addition to income, work, housing, food and health. In addition, effective and sustainable infrastructure generates multiple positive effects and supports our social networks, accessibility to cultural facilities and sport, as well as opportunities to travel and transport goods sustainably. To manage this type of development we need access to economically feasible, reliable, sustainable and modern energy services and sustainable transport systems.

The targets to which PE can contribute include target 9.1 "Develop quality, reliable, sustainable and resilient infrastructure" and target 9.4 "By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes".

We are involved in expanding reliable, sustainable and resilient infrastructure and adapting industry to make it more resource-efficient through the introduction of clean environmentally sustainable technologies and industrial processes. As part of this work, PE is a member of organisations such as the PaperProvince innovation cluster that focuses on sustainable solutions for the Swedish forest products industry.

**Examples of projects:** Train service installation, Hallsberg | **Client:** Train Alliance



PE's contribution to SDG 10

## Reduced Inequalities

Exclusion of various groups in society through the lack of equality undermines trust and participation in the development of society and the use of social functions. This can happen as a result of factors such as ignorance, preconceived or extreme views. In a sustainable society we need to share influence and resources evenly and grant everyone equal rights and opportunities irrespective of gender, religion, disability, age, ethnicity or other factors.

Our assignments allow us to support **target 10.2** "Empower and promote the social, economic and political inclusion".

We can generate these contribution in our projects on urban and area development, property development, tenant customisation and in our work and development of our organisation.

**Examples of projects:** Sustainable area development in Väsjön | **Client:** Sollentuna municipality



PE's contribution to SDG 11

## Sustainable Cities and Communities

Urbanisation is continuing both in Sweden and internationally, with an extensive impact on demand for technological development and resource intensity. Over half of the world's population now live in urban areas. By 2050 this is expected to have risen to 70 percent. Towns and cities often spearhead developments and act as a hub for innovation and new ideas. This rapid and significant migration to cities is giving rise to new requirements that need to be met in an ecologically, economically and socially sustainable way. Growing towns and cities can create new opportunities for economic growth, but can also add to greater social inequalities and pressures on ecosystems. Sustainable urban development comprises sustainable construction and planning, including housing, public spaces such as parks and squares, transportation, food and cultivation, recycling and safer handling of chemicals, which requires institutional capacity and new technology.

The targets to which our projects contribute include **target 11.6** "By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management", and **target 11.7** "By 2030, provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities".

Our guidelines and tools allow us to create functional, secure and attractive environments for people. We undertake projects within property and area development across all development phases over a property's life cycle, from improvements to undeveloped land and new-build construction to the refurbishment and modernisation of existing buildings and property development. For cities and communities to become sustainable, we try to link different issues so that buildings and the space between buildings, transportation, retail, schools and other functions function as a whole. Sometimes this results in it not being possible to optimise a particular issue but in a greater overall benefit to society.

**Examples of projects:** A stronger and more sustainable city centre for Sundsvall | **Client:** Norrlandspojkarna and Svenska Hyreshus



PE's contribution to SDG 12

## Responsible Production and Consumption

The transition to more sustainable consumption and production of goods and services is essential to reduce the negative impact on the climate and environment, as well as on human health. More sustainable consumption and production results in efficient use of resources, consideration of ecosystem services that are essential to the provision of resources from our ecosystems and reduced impact from hazardous chemicals. This not only results in environmental advantages but it can also provide social and economic advantages such as greater competitiveness, global development of business, increased employment and health improvements. Sustainable patterns of consumption and production are therefore also essential to transition to a green economy and for sustainable development.

The targets that PE contributes to include **target 12.4** "By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment", and **target 12.5** "By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse".

PE contributes through our assignments in product development and production-related services. We work for the efficient use of resources, consideration of ecosystem services and reduced impact from hazardous chemicals through the use of environmental databases such as BvB, Basta and Sundahus. We aim to oversee consumption and waste management in our own business processes using our office policy.

**Examples of projects:** Resource efficiency and circular economy in Sweden | **Client:** IVA, The Royal Swedish Academy of Engineering Sciences



Climate change is a threat affecting all development of society. In addition to reducing greenhouse gas emissions, which is a global issue, we also need to manage local issues relating to climate change adaptation. Expected climate change will result in threats to property in low-lying locations and there are risks of changes in precipitation and our food supply.

Our assignments enable us to contribute to **target 13.1** "Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters" and **target 13.2** "Integrate climate change measures into national policies, strategies and planning".

We do this through climate change adaptation projects both as part of urban planning and landscaping, and together with our clients by supporting renewable energy, energy efficiency improvements and resource efficiency. In addition, we also contribute to strategic development within politics and business through our policy experts in resource and climate policy.

**Examples of projects:** A business model for blue green solutions to prevent flooding and drought | **Client:** Climate-KIC



Biological diversity is vital for the Earth's systems for supporting life and our current and future wellbeing is dependent on this, as set out in the convention on biological diversity. Long-term sustainable use of natural resources and ecosystem services are an important factor as many of the world's ecosystems are degraded. Biological diversity contributes to greater resilience of ecosystems. Supplying humanity's need for food, energy, water, minerals, medications and renewable raw materials, without undermining biological diversity by sustainably using and supporting ecosystem services while reducing greenhouse gas emissions are therefore important challenges.

The targets that PE contributes to **are target 15.2** "By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally" and **target 15.5** "Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species".

We can require FSC-certified timber from sustainable forestry and in our landscaping assignments we can stimulate ecosystems and biological diversity, for example by offering urban and land-scape analysis, utilisation reviews, project design (including 3D), natural infiltration of surface water, plant plans with local hardy and non-invasive species and land descriptions, green space factor calculation, care and maintenance plans. In other words, we are also trying to the greatest extent possible to generate positive contributions to the wellbeing of ecosystems in our assignments, including by strengthening urban ecosystem services and nature-based solutions in urban development.

**Examples of projects:** Safe passage over the biggest eco-duct in Sweden | **Client:** Markera Mark Göteborg AB



In central Bengtsfors, western Sweden, property company Bengtsforshus is planning to build a seven-storey building. At an early stage of the assignment PE was tasked with comparing the cost of constructing the building with a solid timber frame and the cost of using a steel and concrete frame. We were then commissioned to produce programme documentation for the building.

Bengtsforshus needs to increase its portfolio of apartments and has decided to construct a building with a timber frame. Using a solid timber frame offers a number of advantages. Wood is a renewable and climate-neutral material and generates less carbon dioxide emissions in the production process than other building materials. In addition, construction time can be significantly reduced through the use of prefabricated timber elements. PE has considerable expertise in solid timber construction, and

early on in the assignment we were asked to examine if it would be financially viable to construct a seven-storey timber frame building in central Bengtsfors. Our work resulted in a cost estimate showing that the cost of constructing the building using a timber frame would not be greater than constructing the same building using a steel and concrete frame.

A timber frame was therefore chosen and PE was commissioned to produce the programme documentation for the seven-storey building, which has a gross floor area of almost 3,000 square metres. Interviews were conducted with future tenants to find out about their needs and preferences. PE architects, landscape architects, fire safety consultants, designers, acoustic engineers, cost accountants and planning managers then worked to produce the programme documentation.

The building is planned to comprise apartments tailored for secure housing, shops, offices and a dental surgery.



# It's a common perception that wood is more expensive to build with than steel and concrete

## Interview with Mays Haj Hamid, timber frame designer

## What does a timber frame designer do?

A timber frame designer is a construction designer who specialises in timber project planning and design. We scale, calculate and perform stability analyses for loadbearing frames. Designing the timber frame for a building like an apartment building requires specialist expertise in timber and its properties. We also develop construction documentation for construction sites and production in general. Timber frame designers also have significant know-how about fixings between the loadbearing parts of the timber design, which together form the structure of the building. Timber design fixings are more complex than those used for concrete and steel. This is because timber is a lighter material that responds differently to the elements.

## What was your role in the Nygård, Bengtsfors project?

For that project I drew up design solutions, performed stability calculations for the entire construction and calculated dimensions for the loadbearing walls and beams.

## What was unique about the project?

Building apartment blocks with timber frames is gaining ground and we have previously produced timber designs, but not as high as seven floors, so that was unique.

## What challenges did you encounter and how did you solve them?

One challenge was ensuring the stability of the timber construction. We solved it by making the actual stairwell from concrete, which is a standard solution when constructing a building with so many floors of timber, and that increased the weight of the entire structure.

Another challenge was the height of the first two floors with a ceiling height of 3.2 metres. This required us to contact various suppliers to ensure they could supply cross-laminated timber (CLT) elements with these specific dimensions. Not all the suppliers could offer the specific dimensions because of limitations to their production.

## What difference did you make for the client?

As well as the major environmental advantages, the client was really pleased with the results and the cost of building with timber ended at the same level as traditional construction. I think achieving this was thanks to our extensive experience of timber construction. I also believe that our detailed work in checking costs for a loadbearing timber frame was really appreciated.



## **Priorities**

The materiality analysis is at the heart of our sustainability work. It prioritises our sustainability work based on the expectations of stakeholders and the impact on our business.

For us, sustainability is a long-term issue. We take a holistic approach to improving with regard to all aspects of sustainability and continually measure outcomes to ensure we are moving in

the right direction. The materiality analysis helps us understand whether our sustainability work has the right aims and focus. Based on this, we prioritise development initiatives within the Group.

## PE 2018 materiality analysis



## Material topics

Materiality analyses are based on a stakeholder analysis and an analysis of sustainability from a business perspective. The stakeholder analysis has been conducted by analysing documentation based on engagement with our eight stakeholder groups. We have made an interpretation of the sustainability topic for each stakeholder group. This compilation uses a weighting of the stakeholder groups, with employees and clients as the most important stakeholder group, followed by the state and government agencies, our owners and society as a whole. Our business analysis has similarly assessed each sustainability topic based on the possibility of reducing risk, increasing our relevance, reducing costs or increasing revenue as a way of quantifying the significance of the financial, environmental and social impact.

The 2018 materiality analysis identified six topics of sustainability as being material; employee wellbeing, stable economic performance, social advocacy and analysis, equality, employee

sustainability capabilities and sustainability contribution through our assignments. These are in line with material topics identified in 2017 (2018 equivalent in brackets): gender equality (equality), employee work environment (employee wellbeing), employee health and safety (employee wellbeing), employee training (employee sustainability capabilities + employee wellbeing) and five strategic issues that now come under sustainability contribution through our assignments and identified through social advocacy and analysis in 2018.

During the year our work was mainly prioritised to pursue development within our material topics. The highlights of the work in 2018 contain a number of development initiatives relating to one or more of these material topics.

You can find out about the highlights of our work in 2018 on pages 8–14.

## Material risks

	Material risks	Opportunities
	<ul> <li>Risk of lower chargeability due to illness</li> <li>Risk of deficient quality in our services due to carelessness and lack of commitment</li> <li>Risk of high employee turnover</li> <li>Risk of difficulty recruiting the right skills</li> </ul>	<ul> <li>Ability to raise quality in our services through wellbeing and innovative employees</li> <li>Ability to attract and retain employees</li> </ul>
Stable financial performance	Risk of not meeting our stakeholders' expectations on the economic value we create	Ability to invest in the business and employees     Ability to manage innovation and cooperation
Social impact and analysis	Risk of failing to meet regulatory requirements     Risk of our business decisions not being based on the operating environment	Of us identifying new business opportunities Of us increasing our capabilities within sustainability
Equality	Risk of missing out on valuable skills if we do not actively seek to create equal opportunities for everyone	More innovative solutions through mindset diversity
Employee sustainability capabilities	Of us not having the capabilities our clients expect	Greater relevance for our clients     Stronger employer brand
Contribution to sustainability through our assignments	Of us not taking the responsibility that our stakeholders expect	Greater relevance for our clients     Contributing to greater credibility as an urban planner

Our material sustainability risks can be condensed into two risk areas, whereby we take active measures to reduce the negative impact and support the positive impact.

In order to reduce our *skills risk*, risk of failing to attract, retain, develop and offer the right skills, we are taking active measures regarding our employees' wellbeing, professional development and creating equal opportunities for everyone. This work is managed by our HR organisation, for which in 2018 we laid

the ground to provide further support four our managers and employees.

Risks linked to *stakeholder expectations* involve us not meeting the expectations of our stakeholders. Particularly with regard to binding requirements and client and owner expectations, we are reducing these risks by conducting market analysis and ongoing stakeholder engagement. Next year we will further raise our level of ambition on engagement with stakeholders.



The Väsjön development area in Sollentuna north of Stockholm is to be the site for around 4,000 detached houses, terraced houses and apartment blocks. The area is being constructed in a sensitive area between a nature reserve, lakes and recreational areas, making for a challenging construction process. PE is involved as a sustainability expert and is contributing to the sustainability programme, coordination, social sustainability and support of sustainability-related innovation.

Väsjön will be a small-scale, varied district with natural surroundings and an emphasis on an active lifestyle. The area will also be an integral part of the Edsberg district and will gradually be expanded until 2032. Väsjön is able to accommodate around 4,000 new homes in the form of detached houses, terraced houses and apartment blocks where approximately 12,000 people will live and work. The Väsjön area is being constructed in a sensitive area between a nature reserve, lakes and recreational areas and consists of 13 subprojects divided into 11 local development plans. This makes for a complex construction process – physically, organisationally and chronologically.

A lot of consideration has been given to the existing natural environment and terrain in terms of the structure and design of buildings, street network and townscape. The complex terrain with differences in height and retained ecological values poses

significant challenges in terms of traffic flows, transport and oth er infrastructure solutions such as water and sewers and waste disposal systems.

## Cable car to the commuter train station

Väsjön will also have a compact townscape with narrow streets, alleys and small neighbourhood parks, which affects the planning and layout of the area. There is therefore a focus on walking and cycling, solutions for good accessibility and an efficient public transport system, including a cable car to the commuter station. This is planned to keep dependence on cars and trucks in the area to a minimum.

A sustainable Väsjön also involves a variety of tenancy forms and functions, as well as planning and design work. The emphasis is on interaction with what is unique about the site, such as the accessible natural environment and opportunities for sports and leisure activities, both after completion and during the construction phase.

## One sustainability programme, four focal areas

Väsjön has ambitious sustainability goals and sustainable development is reflected to some extent in all its development projects and strategic work. A sustainability programme with four focal areas of Sustainable Construction, Sustainable Transport, Sustainable and Thriving Natural Environment and Sustainable and Resource-efficient













## Economic, ecological and social sustainability work

## Interview with Niklas Svensson, sustainability strategist at PE

## What does a sustainability strategist do?

A sustainability strategist works both strategically and operationally with sustainable development. This is because sustainability work often involves a planned change and improvement process for a product, building or a community. Sustainability is a systematic concept in which responsibility and application lie with various different actors. Cooperation, know-how and enthusiasm are therefore important elements that a sustainability strategist can and should bring to societal development projects, and many other projects.

I work both strategically and operationally and am ideally involved throughout the project process, or as long as I am able, to gain a comprehensive view and identify and improve weak aspects or elements. And that's particularly useful for the innovation projects that I'm involved in.

## What has been your role in the Väsjön project?

I started working on the Väsjön project in autumn 2016 when I was asked to revise and enhance the project's sustainability programme. This was developed through cooperation in SGBC's CityLab Action in 2017, which I led and coordinated.

In 2018/2019 I've been responsible for leading projects on sustainable innovation and solutions, and local cooperation on Väsjön, which has resulted in a number of development projects linked to Väsjön's economic, ecological and, above all, social sustainability work during and after the construction phase.

In 2019 we will be starting a new innovation project in Väsjön for which I'll be the project manager. It involves opportunities to improve the process for gathering, sharing and analysing data from an entire area over the course of a long construction period.

#### What difference have you made for the client?

I've been an important part of the Väsjön project's strategic sustainability, innovation and urban development work. I have also been responsible for the project's applications, follow-up, and sometimes implementation of innovation tenders and development support.



# Sustainability targets and outcomes

We have long-term sustainability goals that each year we measure, analyse and take action to achieve.

## Economy

Economic value	2017 outcome	2018 outcome	2020 target
Net revenue, SEKm	1,171	1,224	
Distributed value, SEKm			
Employees	741	786	
Shareholders	38	57	
Suppliers	337	347	
State & government agencies	20	11	
Lenders	8	6	

Anti-corruption	2017	2018	2020
	outcome	outcome	target
Communication and training on code of conduct	0%	20%	100%

**Analysis and measures:** In conjunction with the IPO, management and key personnel received training in anti-corruption measures, and policies communicated to the organisation were also updated in connection with this. The target is for 100% of them to have undertaken anti-corruption training by 2020.

## Environment

Total	500	537	
Travel by train (tonnes of CO <sub>2</sub> equiv.)	1.8	2.8	
Travel by plane (tonnes of CO <sub>2</sub> equiv.)	77	124	employee
Travel by road vehicle (tonnes of CO <sub>2</sub> equiv.)	403	392	Target per
Direct CO <sub>2</sub> emissions (Scope 1)	2017 outcome	2018 outcome	2020 target

**Analysis and measures:** It can be seen that emissions from travel by road vehicle are decreasing in favour of train and plane. Note: We provided the incorrect figure for direct  $\mathrm{CO}_2$  emissions in 2017 (travel by plane: 34, travel by train: 0.8), and provide the correct figures in this report.

Indirect CO <sub>2</sub> emissions (Scope 2)	2017	2018	2020
	outcome	outcome	target
Electricity for office-based operations (tonnes of CO2 equiv.)	18	18	

GHG emissions intensity	2017 outcome	2018 outcome	2020 target
Emissions per employee	0.47	0.51	0.31
Carbon dioxide emissions per person, Sweden (Source: Swedish Environmental Protection Agency)	5.3	-	

Supplier review	2017	2018	2020
	outcome	outcome	target
Percentage of suppliers that have received and accepted PE's supplier code of conduct	0%	1%	100%

**Analysis and measures:** We currently measure all suppliers because we do not yet have a system in place for supplier management. The target of 100% by 2020 is based on identified critical suppliers.

## Social factors and personnel

Health and safety	2017 outcome	2018 outcome	2020 target
Number of accidents per 1,000 employees	0	0	0
Industry average, occupational injuries per 1,000 employees for Architectural and Technical Consulting Businesses	0.3	0.3	-
(Source: Swedish Work Environment Authority)			

**Analysis and measures:** We have not received any reports of accidents in 2018. To be valid, an occupational injury report must be confirmed by the employer. We suspect there are significant unrecorded figures for reports of psychosocial ill health. We take measures to prevent the occurrence of psychosocial ill health, including through manager and leadership development, continual employee reviews and regular employee surveys.

Sickness absence	2017 outcome	2018 outcome	2020 target
Sickness absence	3.1%	3.9%	Lower sickness absence than the average for Sweden
Average for Sweden, absence due to sickness (Source Sweden: Confederation of Swedish Enterprise & Ekonomifakta)	6%	4.1%	

**Analysis and measures:** Sickness absence increased slightly in 2018. This could be attributed to an intensive year with a number of acquisitions and the integration of companies. Our aim is to track these figures closely and take measures to return to lower levels.

Discrimination	2017 outcome	2018 outcome	2020 target
Number of reported cases of discrimination	2	0	0
Number of reported cases of discrimination, Sweden (Source: reports to DO)	2,276	2,475	

**Analysis and measures:** We have not received any reported cases of discrimination, in line with our target.

Collective agreements	2017 outcome	2018 outcome	2020 target
Percentage of employees covered by collective bargaining agreements	not meas- ured	75%	100%
Sweden, private sector, percentage of salaried workers covered by collective agreements (Source: Swedish National Mediation Office)	84%	-	-

**Analysis and measures:** Our target is for 100% coverage by collective agreements in 2019. We will increase coverage markedly as a result of the merger of legal entities that began in 2018.

Gender balance (Women   men)	2017 outcome	2018 outcome	2020 target
Board of Directors	33%   67%	29%   71%	The gender
Management	29%   71%	39%   61%	balance should be 40/60 per-
All employees	29%   71%	29%   71%	cent or more even
Gender balance among pro architects and engineers:	ofessional		
Executive positions	27%   73%		_
All	35%   65%		

**Analysis and measures:** During the year we addressed this issue in Group management and evened out the distribution from 0% women to 20%. We are continuing in 2019 to support a more even gender balance among our employees and in our management groups, based on our diversity and gender equality policy.

## About this report

## Report information

This report covers PE's business operations from 1 January 2018 to 31 December 2018 and complies with the guidelines of international organisation Global Reporting Initiative (GRI). The report has been prepared in accordance with GRI Standards at the application level of Core and GRI Standard's 10 reporting principles:

#### 1. Stakeholder Inclusiveness

Sustainability topic**Transparency and stakeholder engagement** we describe what measures we take to include our stakeholders. Under **binding requirements** and **priorities** we highlight expectations from our stakeholders and how we relate to and meet these.

#### 2. Sustainability Context

The section **Sustainability Targets and Outcomes** includes relevant comparative figures to put our outcomes in context. We also show how our work contributes to the UN's 2030 Agenda; the Sustainable Development Goals and targets.

## 3. Materiality

The **Priorities section** reports the significance of our sustainability topics for our stakeholders and the impact on our business in the materiality analysis.

### 4. Completeness

Our **sustainability strategy** with related **sustainability topics** defines our comprehensive sustainability work.

## 5. Accuracy

The information in this report is accurate. We have endeavoured to have a consistently even and sufficient level of detail so our stakeholders can assess our performance.

## 6. Balance

The Sustainability Targets and Outcomes section refers to both positive and negative aspects of our outcomes.

## 7. Clarity

Our ambition has been to systematically include the information required for our stakeholders to gain a good overview without having to refer to too many other sources.

#### 8. Comparability

We have purposely chosen indicators that we know are used by others and that we previously measured to gain comparability over the years.

## 9. Reliability

This report has been reviewed by the company's auditors in conjunction with the annual accounts. The targets and metrics that we report are included in our business systems and are compiled centrally each year.

#### 10. Timeliness

We produce our sustainability report annually in conjunction with our annual accounts. We compile our sustainability report annually in conjunction with our annual accounts. The latest sustainability report was published in April 2018.

Unless stated otherwise, the information in this report covers all PE's wholly owned companies in Sweden, including acquisitions completed before 1 January 2019. The acquisition made in December 2018 was Integra Engineering AB. As this company was acquired in late 2018 it is not included in our reporting of targets.

Point of contact for the sustainability report:

Amanda Tevell
Convener of PE's sustainability council
amanda.tevell@pe.se

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## Headquarters

Postal address: Box 47146 SE-100 74 Stockholm, Sweden

Visiting address: Årstaängsvägen 11 117 43 Stockholm, Sweder

**PE** is a consulting group within engineering and architecture. PE comprises over one thousand architects, engineers, project managers and specialists who identify opportunities, develop concepts and face challenges. PE is represented in more than 35 locations and delivers solutions that work here and now, and for future generations. Find out more at **pe.se**.

