



CSR Report 2019

Communication on progress





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Letter to our stakeholders

Since the foundation of DEIF in 1933, our overall goal has been to develop the company's long-term value based on business ethics and responsibility towards our employees, business partners and society as a whole.

In recent years, the realisation that we need to harness our consumption of valuable natural resources and curb climate change has added a new dimension to our business. As a leading company in power management, we can play an important role in greening our society; first and foremost by increasing the energy efficiency of power installations and by supporting the electrification of our society powered by renewable energy sources.

To underline our role in this transition, we introduced a new company purpose in 2019, stating that we are in business to make the planet greener by offering the world's best and most reliable control solutions that can improve the global energy efficiency.

While we continue our strong commitment to the UN Global Compact, we are also ready to take the next step in our sustainability work by integrating the UN Sustainable Development Goals (SDGs) in the company's long-term strategy and in our core business activities.

The SDGs enable us to be part of a global movement that directs our efforts towards the areas, where DEIF can make the biggest impact with our solutions and the way we do business. This also includes a continued focus on our employee's safety, well-being and motivation and care for the communities that we are part of.

In my mind, there is no doubt that high business ethics and a strong focus on sustainable solutions go hand in hand with good business. We look forward to continuing our exploration of next generation power management solutions that can pave the way for a greener future.




This is our **Communication on Progress** in implementing the principles of the **United Nations Global Compact** and supporting broader UN goals.

We welcome feedback on its contents.



Toke Foss
CEO

It's all about power efficiency

About the DEIF Group – Purpose, business model and core values

Our business

DEIF develops and manufactures green, safe and reliable control solutions and products for decentralised power production – at land, at sea and for wind systems.

We focus on providing technology that improves energy efficiency for all fuel types and applications. Furthermore, we specialise in control solutions for renewables, notably wind power and advanced hybrid systems that integrate different energy forms, including solar and batteries.

By means of our products and services, DEIF supports the transition towards greener and more energy efficient solutions for decentralised power/co-generation plants and ships.

Our approach

As a company with global activities, we need to navigate different cultures, practices, ethics and moral standards. We do this by operating as one company with shared values and based on the DEIF Code of Conduct from our headquarters in Denmark to our sites in Asia, Americas and Europe.

Since the foundation of the company in 1933, DEIF has been a family-owned, value-based company. We protect this heritage and want to be recognised for our responsibility, honesty and integrity in everything we do.

Our purpose is to supply the world's best and most reliable control solutions.

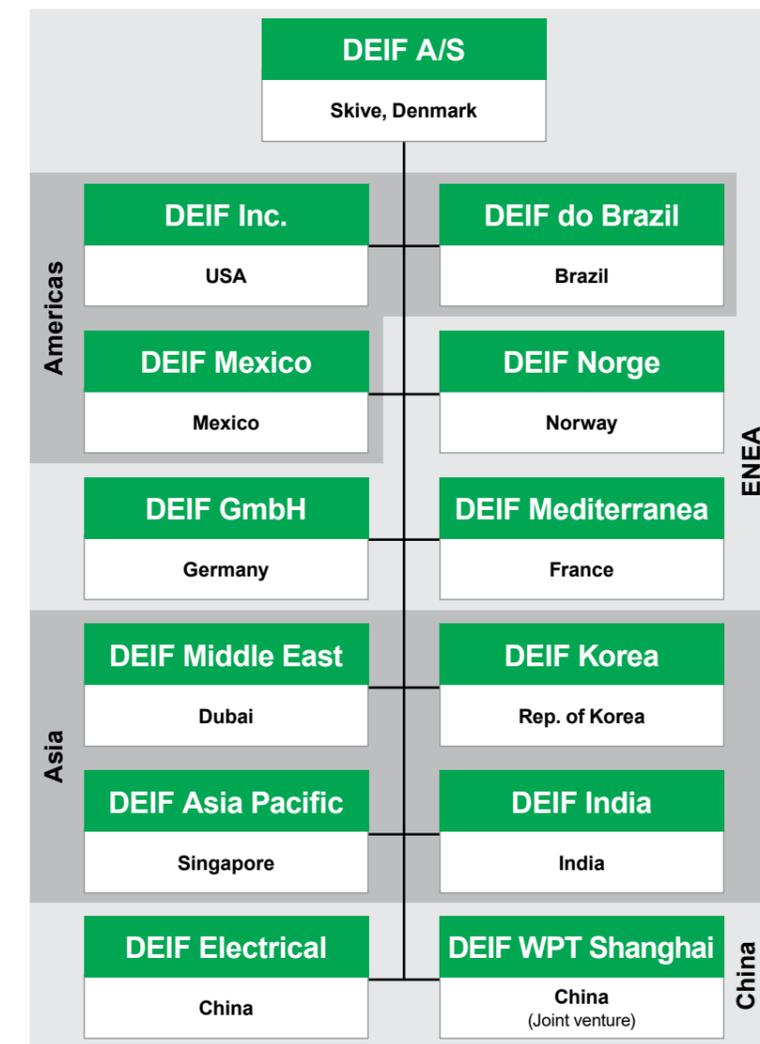
We make our planet greener by improving global energy efficiency.

Our ambition

The overall goal of DEIF is to develop the company's value in the long term, always based on high ethics in relation to our employees, business partners and society as a whole.

It is our ambition to be the preferred supplier of sustainable power efficiency. At the same time, we want to reduce the company's footprint and engage in development of people and communities, where we do business.

Company structure



DEIF business areas



 Founded in 1933 and headquartered in Denmark

 546 employees

 Revenue 567 mDKK. (2019)
EBIT 29.5 mDKK (2019)

 11% of revenue invested in new product development



How we work with CSR

DEIF Code of Conduct

Since 2016, DEIF has been a member of the UN Global Compact, and our CSR work is based on the ten principles of the Global Compact.

The mainstay of our CSR activities is the DEIF Code of Conduct, which reflects the ten principles of the Global Compact and guides leaders and employees in daily decisions, actions and behaviour.

All employees have been instructed in the Code of Conduct. We conduct regular training by use of dilemma cases, where teams and individuals can practice how to handle difficult situations in topics like corruption, discrimination, safety and environmental issues.

The Code of Conduct is part of DEIF employment contracts or local Employee Handbook and is introduced to all new hires in the global organisation through the onboarding programme.

We expect suppliers and their sub-suppliers and other cooperation partners to live up to our principles of ethical business practices and to deliver sustainable solutions. We carry out audits of all new suppliers; in 2019, four audits/assessments were conducted.



Applying the UN Sustainable Development Goals

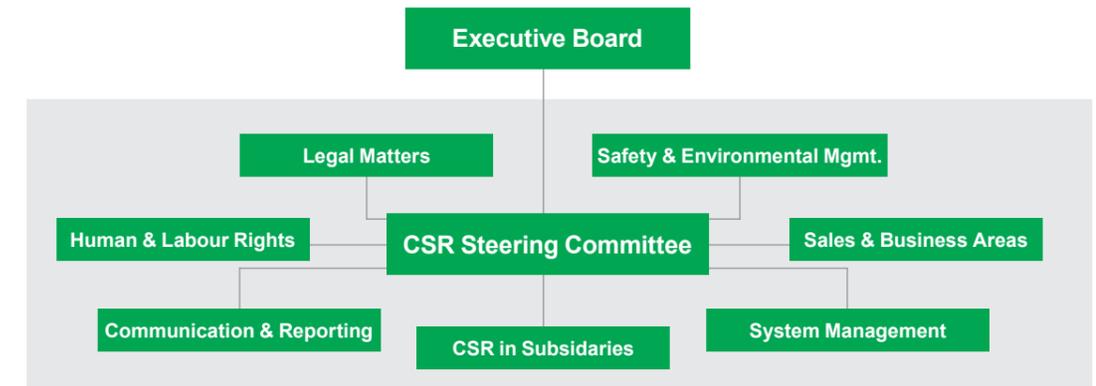
In 2019, we started a process to investigate how we can best integrate the UN SDGs in our core business and long-term strategy. The process involved the following steps:

- **SDG Master class:** The CSR Steering Committee took part in a master class on the SDGs co-developed with the local business academy with a view to educating ourselves as well as developing a master class prototype that can be used in other companies. The master class comprised 3.5 days of class-room training, workshops and visits to other companies to share best practice.
- **SDG Workshop with executive Board:** Based on learning and findings from the master class, the CSR Steering Committee facilitated a workshop with the Executive Board in order to discuss the application of the SDGs in our core business and strategy processes. The workshop included a preliminary value scan exercise to identify the most relevant SDGs, where DEIF can make the biggest impact. The SDGs will be incorporated in the strategy work and cascaded to the organisation to get everybody on board.

Organisation of the CSR work

The CSR work at DEIF is governed by the CEO, while a cross-functional CSR Steering Committee advises on ambitions, coordinates activities and follows-up on progress. The Steering Committee meets six times a year. The Health, Safety, Environment (HSE) organisation is heavily involved in the work, and work groups are set up for specific tasks on ad hoc basis.

All managers are responsible for continuous follow-up and improvements within their areas of responsibility to make sure that the CSR mind-set is embedded and kept alive in all parts of the organisation.



Systematic CSR assessments

Each year, internal assessors conduct an in-depth review of CSR compliance following the guidelines set up by the UN in the Global Compact Self-Assessment Tool. The assessments are used to monitor compliance and progress as well as to identify areas of improvement

So far, assessments have been carried out at the headquarters in Denmark and in the biggest subsidiaries in China, Singapore, Brazil, and India. Next up is South Korea in 2020.



→ [Read the full case study](#)



CASE

Terra-Gen gains 2% efficiency and offsets 413 ton CO2-e – every year

A DEIF control retrofit of 20 wind turbines improved turbine performance by 2% and decreased downtime. For Terra-Gen, the retrofit increased revenue and reduced operating costs, while the efficiency gains offset the carbon footprint of energy production in California by 413 ton CO2-e every year.

Based on the positive results from the first 20 wind turbines, Terra-Gen contemplates a retrofit of the remaining 50 turbines at the Pacific Crest wind farm. This would mean CO2-e savings of 1100 ton per year.

Terra-Gen is a leading US-based renewable energy developer that operates over 1.3 GW of wind, solar and geothermal facilities.

“We strive to run our turbines efficiently – at the lowest cost. The Pacific Crest Wind Farm is a high wind site, and the cost of downtime is critical. So, having reduced downtime and increased productivity with 2% in only six months tells me that we were right to go with DEIF.”



Ward Scobee
Senior Vice President
Terra-Gen, LLC.

Fortifying the base, while preparing for the next steps

CSR Management

In 2019, the CSR Steering Committee and the Executive Board have prioritised activities to gain in-depth understanding of the UN Sustainable Development Goals and how these can be integrated in our core business and strategic development. Furthermore, we worked to strengthen our activities in two areas identified in the 2018 CSR assessment, i.e. our risk management and anti-corruption training.

Major activities and results in 2019 include:

- **Risk management:** Annual review of the risk, opportunity and impact of our business operations and activities, based on a review of sound data and a deep understanding of emerging trends. The overall risk evaluations showed no major and/or severe CSR risks related to our business. Implementation of risk screening tool for projects. In 2019, 559 projects were screened.
- **Anti-corruption:** The risk of corruption was again in 2019 mapped for all countries where DEIF is active. DEIF's subsidiary managers and the sales management at DEIF headquarters reviewed both the general risk in their area and the CSR performance of DEIF's worldwide network of over 40 dealers, service partners and other DEIF partners in their geographic area. We also developed and implemented anti-corruption training for relevant functions, notably sales and procurement in Denmark.
- **New whistle-blower system:** In 2019, we developed and implemented a global whistle-blower system, enabling all employees throughout the DEIF Group to report any suspected criminal act. The system also ensures that appropriate steps are taken in relation to matters reported via the system. The implementation of this system included guidelines for both managers and employees.

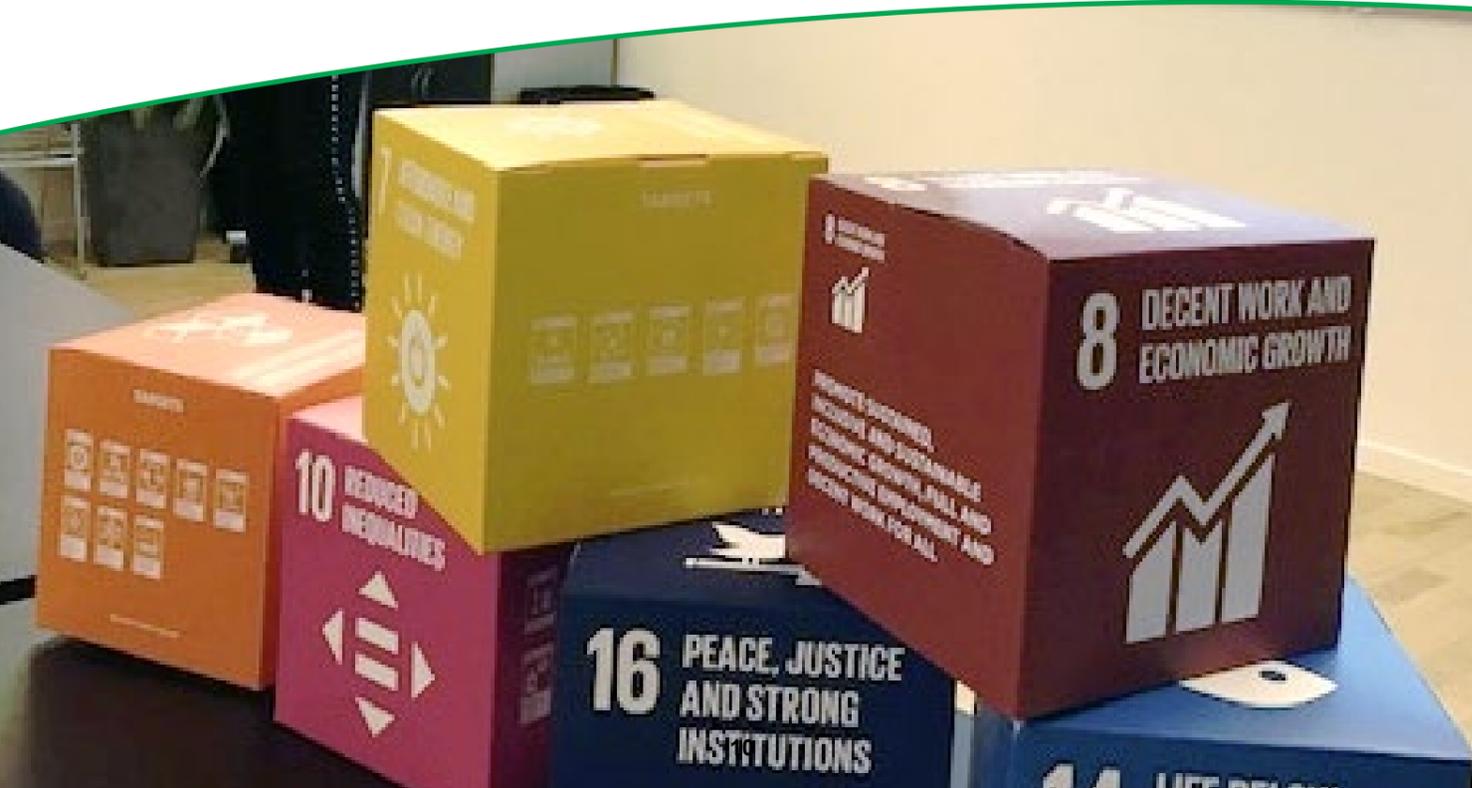
Next steps in 2020

- **Implement UN SDGs in core business and long-term strategy:** Continue the strategic process and include relevant SDGs in the long-term strategy as well as in core business activities of DEIF. Communicate and involve employees across DEIF in implementing the sustainable development goals.
- **Ensure focus on what is most important in the CSR work:** Carry out a materiality assessment with internal and external stakeholders in order to ensure that we prioritise areas where DEIF can make the biggest difference.
- **Review of whistle-blower system:** A general review of reports made in DEIF's whistle-blower system during 2020 will be made in December 2020.



DEIF CEO is vice chairman in national Climate Partnership for production companies

In 2019, the Danish government set up the ambitious goal that Denmark would reduce the carbon emissions by 70% in 2030. In order to find ways to reach the goal, the government established 13 climate partnerships with the private sector. DEIF CEO Toke Foss was appointed vice chairman for the Climate Partnership for production companies.





→ [Read the full case study](#)



Kristoffer Morgenstern
Tech Superintendent
Fjord Line

“We have aimed at reducing the fuel consumption, but it is the first time ever we have reached this level. It is crazy, and even though the weather has a large impact, the drop in fuel consumption is not solely a result of good weather but also due to the implementation of Blueflow.”

CASE

Fjord Line reduces fuel consumption by 2-5 % and saves 2,300 ton CO2-e per year

By installing Blueflow, an eco-driving system for ships, the Norwegian ferry line Fjord Line reduces fuel consumption by 2-5% depending on weather, current and load conditions. Each ferry in Fjord Line's fleet sails 21 hours per day all year. Fuel savings of just a few percent therefore amounts to considerable savings on the energy bill and on CO2 emissions.

Blueflow by DEIF is an aid to the crew on the bridge, in the engine room and at the head office to ensure optimum manoeuvring, speed, acceleration and the number of engines used.

Fjord Line operates four ferries in Scandinavia transporting 1.4 million passengers, goods and trucks annually.



→ [Read the full case study](#)



Alf Magne Simonsen
Project Manager
Eidesvik

“The crew is happy with the solution. As they become familiar and gain confidence in the upgraded system, operational savings will improve even more. It has been a pleasure working with DEIF, and we now have a well-functioning solution for a complex installation.”

CASE

Battery hybrid solution saves 12-13% on fuel – 3,000 ton CO2-e

To ensure continued compliance with customer contracts, Norwegian shipping company Eidesvik installed a new battery hybrid solution onboard their inspection, maintenance and repair vessel Seven Viking. Following the installation of the new power solution, the existing DEIF Delomatic 4 control system was upgraded with new hardware/software and an increased number of controllers.

After the first months of operation, the hybrid solution has returned fuel savings of 12-13% corresponding to more than 3,000 ton CO2-e every year.

Eidesvik owns and operates ships within the business areas Supply, Seismic, Offshore Wind and Subsea, primarily on the Norwegian continental shelf. Eidesvik owns and operates 22 vessels.

DEIF is a value-based and motivating place to work

Human and labour rights

We support and respect the protection of internationally proclaimed human rights and make sure that we do not in any way contribute to the violation of these rights. We strive to secure equal rights. Therefore, we commit to group-wide targets and efforts to increase the number of women at all management levels and to provide job opportunities for marginalised groups and people with reduced ability to work. We want to offer a safe and inspiring work environment with opportunities for personal and professional development to all our employees.

Activities and results in 2019

- **Women in leadership:** Despite our continued focus on increasing the number of women at all levels in the organisation, the number of women in management decreased compared to 2018. In 2019, 20% of managers were women compared to 21.9% in 2018. The decrease was caused by an organisational restructuring at the end of 2018, which also affected female managers. Two out of six members of the DEIF Executive Board are women.



- **Employee engagement survey:** At regular intervals, we carry out employee engagement surveys across the whole DEIF Group to monitor satisfaction, motivation and loyalty. The last survey was carried out in 2017, and in 2019 we did the groundwork for a new, updated version. The new survey was carried out at the beginning of 2020 with a response rate of 97%.

- **Involving employees in continuous development of the workplace:** For the last couple of years, we have conducted roundtable meetings with people from across the organisation to get feedback and input on how we can improve the workplace. The roundtable meetings are facilitated by top management. In 2019, about 60 people in Denmark and Germany participated in smaller cross-functional groups. The outcome is a number of actions, which were communicated and kick-started in 2019.
- **Creating jobs for marginalised young people:** DEIF actively supports Code of Care Skive, an NGO that seeks to create job opportunities for marginalised young people. In 2019, we hosted a visit for a group of young people, established a number of traineeships and offered mentor training. Next step is to find opportunities for part time jobs in our accounting department and production.

- **Reuse of IT equipment:** In Denmark, we collect and sponsor IT equipment for ReDI School, an organization that prepares female immigrants to enter the job market faster. We also provided IT equipment to secondary schools and universities in Malawi through the NGO FAIR.



Next steps in 2020

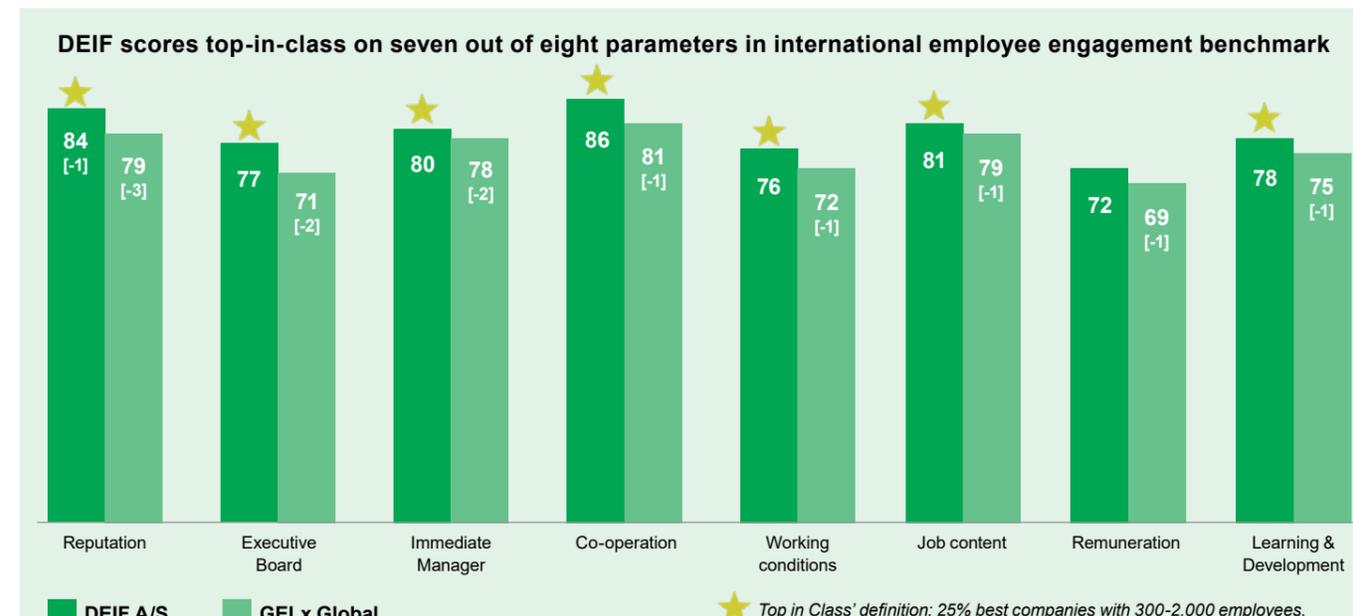
- **Increase number of women at all management levels:** Prepare new recruitment strategy with a special focus on employing more women at all levels. Strengthen the branding of DEIF as a workplace, which is also attractive to women. Establish a mentor network within DEIF to encourage more women to choose the leadership path in their career.
- **Employee engagement:** Communicate and discuss local results from the employee engagement survey in all departments in order to improve where needed.



Team building in Singapore



Team building in Korea



DEIF co-sponsors equipment at local mechanical engineering school.



Safety first

At DEIF, we put our people's safety first, and we aim for zero work-related accidents. We demand the same from our suppliers and other cooperation partners. When working on project sites, we work together with our customers to provide a safe work environment that prevent accidents and do not expose our employees to health and safety risks. We provide safety training, instruction and supervision for all colleagues and we only allow people, who have been instructed in safety measure to carry out the tasks. All DEIF service engineers are trained to make on-site health & safety assessments, and it is the duty of every employee to refuse any work that may compromise safety. We carry out annual audits to make sure that we comply with our safety policy at all times.

Activities and results in 2019

- **Work-related accidents:** In 2019, we had one accident causing absence from work. This is one too many, and our goal remains zero work-related accidents. We recorded 11 near-accidents and continue to encourage our employees to register near-accidents as an effective means to prevent accidents. The rate of sick-leave was 2.9 in 2019, more or less on level with the previous years.



- **Onsite service safety:** During the year, special effort was put into safety measures for onsite services, i.e. when our employees perform retrofit or maintenance on remote sites, e.g. wind turbines or ships. We started implementation of RAMS (Risk Assessment & Method Statement), which is applied in connection with service jobs. No onsite accidents were reported during 2019. DEIF employees travelled to onsite service jobs 865 times in 2019 with an average time of 5 days spent onsite. The number of service jobs is expected to rise in the coming years, driven by the potential of efficiency gains by wind turbine retrofit.



Next steps in 2020

- **Towards zero accidents:** Continue the systematic work to prevent work-related accidents by regular safety walks and careful registration of incidents and near-accidents.
- **On-site safety:** Continue the effort to establish a common platform for onsite service safety, applicable to all DEIF business units with shared tools and reflecting both national and international legislation.
- **Chemical management:** Build up new system for chemical management fulfilling the requirements of new legislation.

Green at heart

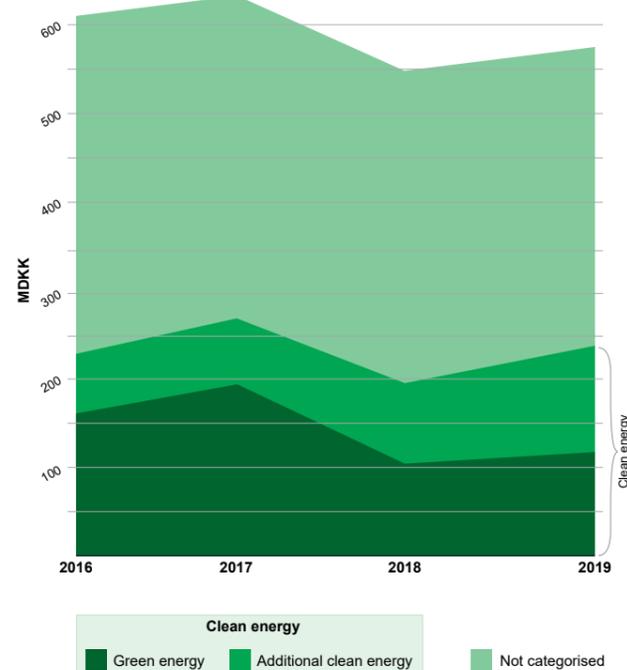
Environment, energy and climate

As a leading provider of power management solutions, DEIF plays an important role in fighting global climate changes. For decades, DEIF has developed and produced products and solutions that enhance energy efficiency in onshore and offshore applications. We have also encouraged the uptake of renewable energy by providing advanced power management systems for wind, solar and hybrid installations and grids.

We call it **Green at Heart**. The sustainability of the world is our concern and responsibility and a vital part of DEIF's DNA. We do our utmost to make an honest and continuously positive impact targeting a more sustainable world. Every day, DEIF products and solutions affect the environment positively by reducing the environmental impact of our customers.

Activities and results in 2019

- **Clean revenue 2019:** Based on the Corporate Knights' methodology and taxonomy used to classify corporate sustainability performance, 41% of DEIF's revenue in 2019 can be ascribed to products and services which have a clear environmental impact.



Examples of clean solutions from DEIF

- **Wind turbine controller retrofit:** Replacement of the original control setup with DEIF's control retrofit solution, resulting in significant energy efficiency improvements.
- **Retrofit of critical power stations:** Highly energy efficient solutions for hospitals, data centres, industrial process control, telecommunications, and media broadcast systems ensuring uninterrupted power supplies in case of mains failure.
- **ASC solar hybrid controller** that interfaces to photovoltaic (PV) solar inverters, battery inverters and, e.g. fuel-based generators for off-peak power production. The ASC controller uses data from sky imager solutions to predict weather and PV production to ensure constant energy production.
- **Battery hybrid solutions for marine vessels:** Reducing emissions and climate impact by ensuring seamless integration of battery hybrid solutions in the power management solution.
- **Blueflow energy management system,** which improves the fuel economy of any kind of vessel. Blueflow assists the crew in optimising navigation, routes and speed while promoting eco-driving to save a minimum of 10% on fuel consumption and reduce emissions.

Definitions

- Green revenue comes from sustainable power production such as wind and solar energy
- Additional clean revenue covers products that optimise power management and reduce fuel consumption
- Not categorised refers to revenue from sales of components, where we do not know the final application of the product. We expect a number of these components will be used in clean energy solutions.

New knowledge-sharing blog

- In 2019, DEIF introduced a new free forum for knowledge sharing on topics ranging from efficient power management and optimisation of power production to digitalisation. The blog supplements the existing channels for knowledge-sharing in webinars and whitepapers.

Visit the blog: → www.deif.com/blog

Next steps in 2020

- **Create a robust strategic framework for target setting and reporting on sustainability.** The framework will be part of DEIF's long-term strategy, ensuring that we use our resources to make the most significant impact on sustainable development.
- **Focus on selling green and clean technology**
 - Utilise the unique potential in retrofitting wind parks to optimise energy production and thus save CO₂.
 - Leverage the opportunities in Blueflow for energy optimisation on ships.
 - Push solutions for microgrids with seamless integration of renewable energy sources and energy storage.
 - Continue to support implementation of battery hybrid solutions, e.g. in marine applications.





→ [Read the full case study](#)



“DEIF is the brains of this operation. Without DEIF we would have no way to strategically manage the energy and the demand output that’s being created onsite that could be intelligently used by the school.”



Arash Habibi-Soureh
Distributed Energy Resources Manager
Johnson Melloh Solutions

CASE

Triple-win at high school: 70% savings on the energy bill, more education, less CO2

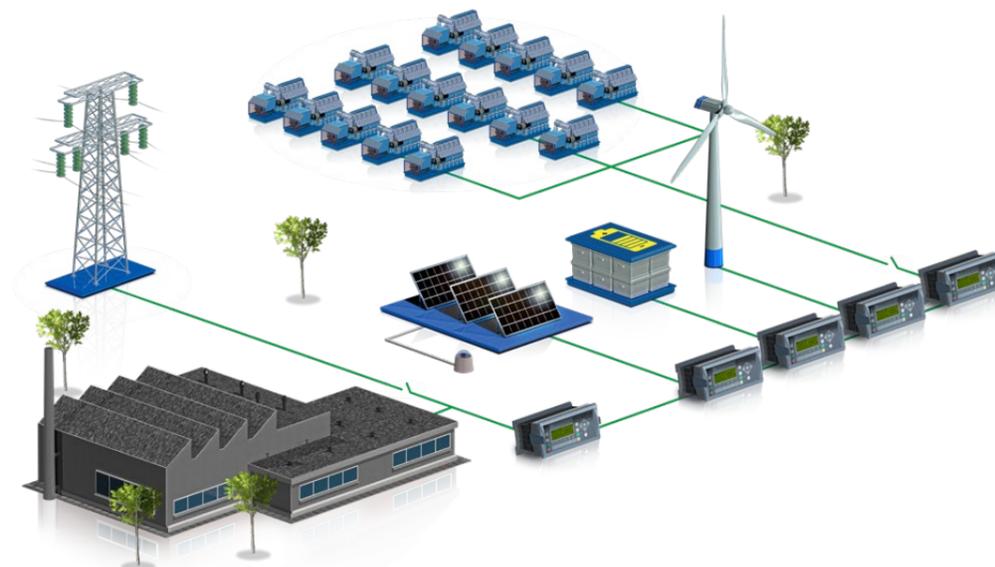
The Ben Davis High School in Indiana, USA, expects to save 70% on the energy bill with the new solar and natural gas generator hybrid system. The savings allow the school to invest more in school programs and teachers rather than power supply. At the same time, the 2 MW solar field significantly reduces the carbon footprint of the school.

The DEIF microgrid control solution ensures reliable power supply at all times and loads, switching seamlessly between the solar field and the natural gas generators.

DEIF’s Automatic Sustainable Controller (ASC) series

The ASC series is designed to support efficient operation of renewable microgrids. The ASC is scalable, flexible and modular, supporting off-grid, grid-tied and hybrid solutions.

The ASC interfaces to photovoltaic inverters and weather stations and automatically controls electricity supply in all load situations.



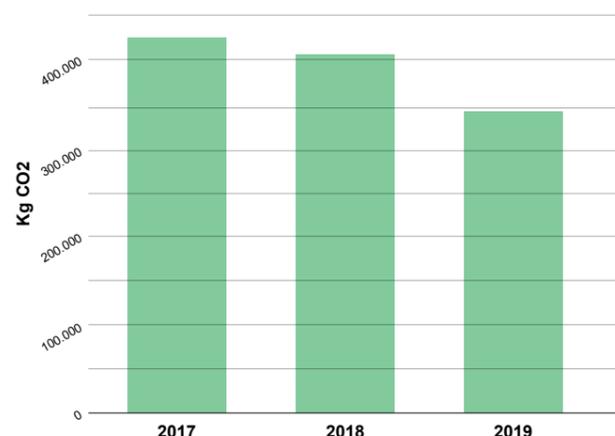
Green at home

Through systematic energy and environmental management, we continuously work to reduce the footprint in our own operations, i.e. save on energy and other resources, recycle waste and protect the environment.

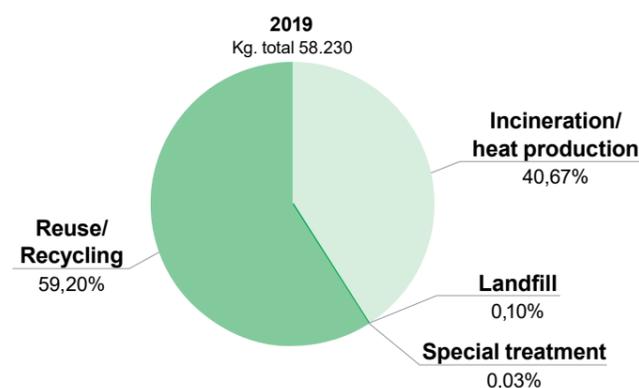
A significant part of the energy consumption of DEIF takes place at the headquarters and production in Skive, Denmark. For the last couple of years, the location in Skive has been supplied by a comprehensive green energy system that includes an Aqua Thermal Energy Storage (ATES) system, a micro CHP plant combined with an advanced Energy Optimisation System. Extension of the system with a solar powered absorption heat pump is now being investigated to increase the cooling capacity.

Activities and results in 2019

- **CO2 emissions from energy consumption:** The carbon footprint of DEIF's Danish activities was reduced by 21% compared to the previous year. The reduction was achieved by changing the energy mix in favour of more electricity, less gas.



- **Waste management:** In 2019, 59% of waste from DEIF's activities in Denmark was reused/recycled, up from 53% in 2018. 0.1% of waste was sent to landfill, and 0.003% required special treatment. The remaining waste was incinerated and used for district heating.



- **Environmental and energy management:** An external audit from Lloyds concluded that DEIF's Quality and Environmental management system is compliant with ISO 9001:2015, ISO 14001:2015 and ISO 50001:2018, section 6.3 (energy review).

- **DEIF in India recycles electronic waste**



Next steps in 2020

- **Energy management:** Map and prioritise most important measure points for CO2 emissions (scope 1/direct emissions and scope 2/indirect emissions) and implement measures to reduce emissions.
- **Waste management:** Increase amount of recycled waste from 59% to 64%. Investigate possibilities to prevent waste on incoming goods in cooperation with suppliers.

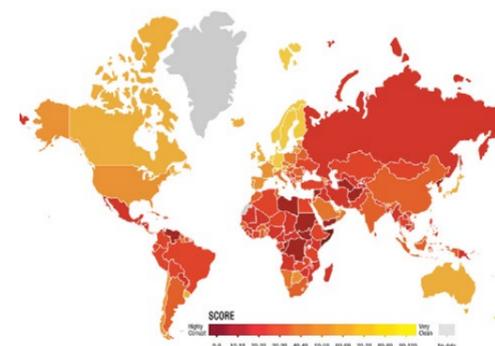
Zero tolerance for corruption

DEIF has zero tolerance for corruption, bribery, extortion and use of other methods that may create conflicts of interest related to our business.

DEIF employees are only allowed to accept minor gifts and attend meetings or events within the scope of normal business practice. Any decisions, actions or behaviour compromising DEIF's stance on anti-corruption will have consequences for the employee(s) involved. Our contracts are always prepared in accordance with existing laws and regulation, and we take care to make sure that our contracts with suppliers, consultants and other cooperation partners include sections on anti-corruption.

Activities and results in 2019

- **Mapping of risk of corruption:** The risk of corruption was mapped for all countries where DEIF is active. DEIF's subsidiary managers and the sales management at DEIF headquarters reviewed both the general risk in their area and the performance of our worldwide network of more than 40 dealers, service partners and other DEIF partners in their geographic area.
- **Increasing awareness of special risk countries:** An updated list of "Most corrupt countries", i.e. countries with a corruption index score of ≤ 40 where DEIF is active, as well as Transparency International's world map 2018 showing the corruption perception index for each country, were published on DEIF's Intranet.



- **Anti-corruption training:** Two internal train-the-trainer workshops on anti-corruption were held at DEIF Headquarters: one for sales managers, and one for all sourcing and purchase managers and employees. At subsequent departmental meetings, the sales managers trained their staff.

- **Anti-corruption e-learning:** 94 employees from the Sales and Purchase departments at DEIF's headquarters completed an e-learning course on anti-corruption in 2019.



Next steps in 2020

- **Global anti-corruption guideline:** To emphasise our commitment to working against corruption in all its forms, we will prepare and implement a anti-corruption guideline applicable to the entire DEIF Group.
- **Global implementation of anti-corruption training and e-learning:** We want to prevent any employee in sales and purchase functions in the global DEIF Group from engaging in corrupt activities. Train-the-trainer workshops on anti-corruption will also be extended to the global DEIF Group. Besides, all managers and relevant employees in sales and purchase functions in all DEIF subsidiaries will be required to complete an e-learning course on anti-corruption in 2020.



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“When everything is running as it should, you forget that the controllers are there. When something goes wrong, you are thankful that you have all these control options at your disposal!”



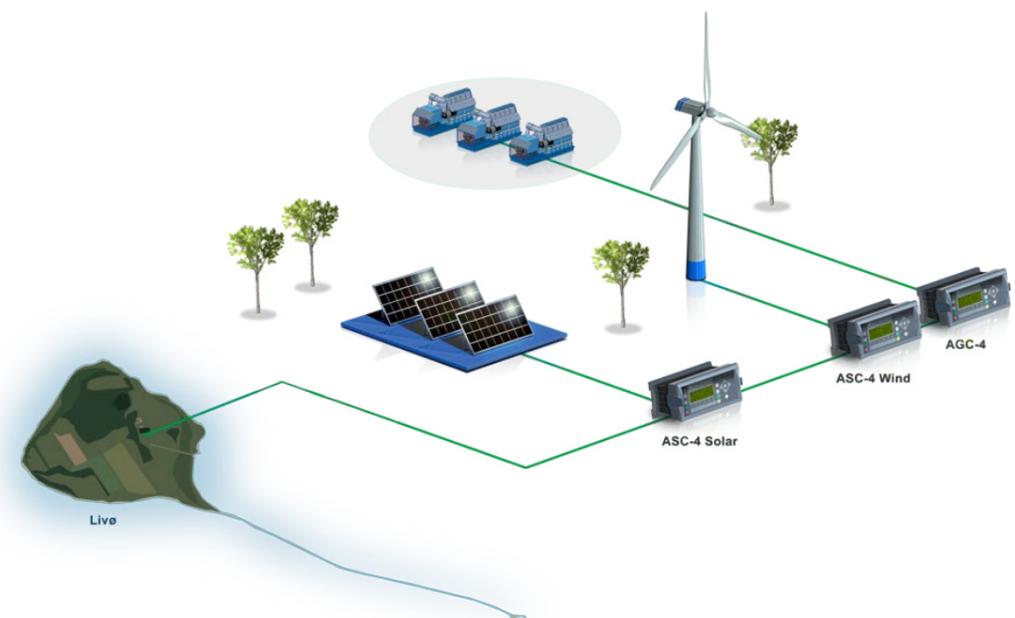
Martin Olsen
Forest Guard on the isle of Livø

CASE Enabling reliable, renewable power supply on off-grid islands

The off-grid solutions from DEIF help islands become self-sufficient with renewable energy. For islands in Denmark and South Korea, DEIF has supplied control solutions for renewable microgrids based on solar, wind and energy storage systems combined with gensets as back-up.

The control solution automatically switches between the energy sources to get maximum input and reliable output with minimum CO2 emissions at all times regardless of weather and load conditions.

The off-grid island experiments prove the feasibility of creating consistent power quality and uninterrupted power generation in off-grid systems based on renewables.





In 2019, the DEIF Social Staff Club invited all employees to give children's clothes and toys to the local branch of the Danish charity organisation Mødrehjælpen. The organisation supports pregnant women, parents and children.

Pictured: Kirsten Wæhrens, Mødrehjælpen (left) and Pia M. Kalms, DEIF (right)

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