

Environmental Clean inputs

We use innovative solutions to reduce our energy needs, while focusing on cleaner energy and other natural resources.

We recognise that working sustainably makes strategic business sense. Groupwide activities support increasing local focus on managing clean inputs. Our sectors and business units also drive this agenda through activities that directly support our customers' needs. Sustainability is embedded throughout the organisation and is a central consideration in the decision making process.

Babcock's Board and senior management are committed to delivering continual environmental improvements across the organisation.

Energy governance

At Group level, an energy and environmental working group meets quarterly with representatives from each sector. The working group, chaired by the Group Energy Manager, designs and reviews the energy and environmental policy and shares best practice.

Sectors and business units set KPIs appropriate to their individual businesses. Energy consumption data is collated into a central database, enabling reduction targets to be established and monitored regularly.

Babcock has held the Carbon Trust Standard for its UK operations since 2010, and will be seeking reaccreditation in 2020. The continuous monitoring of energy consumption and the attention to environmental policies ensure that the environmental impact of the Company's operations is minimised.

Energy management and procurement

We have advanced energy management practices in place across the organisation which allow us to effectively manage our consumptions and emissions. We have implemented a Metering, Monitoring and Targeting (MM&T) strategy which allows us to easily identify and remediate any inefficiencies.

Our Group-wide energy database is key to managing our energy consumption, and provides us with a holistic view of our impact.

The procurement of electricity for our UK activities has been largely centralised for some time, providing benefits including the avoidance of costs.

Babcock has committed to purchasing its power for UK operations in a responsible manner.

Biomass, which features a carbon footprint less than 15% of coal-fired electricity, is our primary energy source.

This form of renewable energy also supports healthy, sustainably managed working forests which help to fight climate change.

We also benefit from local alternative energy solutions as demonstrated at Devonport Dockyard. Under a Power Purchase Agreement (PPA), Devonport Dockyard purchases 100% of its power and a major percentage of its steam requirements from the adjacent MVV, energy from waste, CHP plant.

The facility takes in waste from the local area and converts it into electrical and steam energy. This bespoke arrangement reduces the carbon footprint and environmental impacts of our operations.

In our Aviation business, we are working with our customers and supply chain to identify opportunities to add OEM-approved bio-jet fuel in order to use Sustainable Aviation Fuel (SAF) in our Emergency Medical Service, Aerial Firefighting and Oil and Gas-related activities.



Energy improvements in civil nuclear

This year we introduced a range of energy improvements at our sites in Chester and Whetstone.

In Chester, we installed new air compressors which require less power to run and produce a higher capacity of compressed air. As well as LED lighting in the high bay workshop, we've installed new gas-fired warm air heaters with timers, winter/summer modes and an automatic roller shutter door in the main workshop area.

Using more efficient heaters together with new doors to keep the heat in resulted in our using 33% less electricity and 41% less gas than the previous year.

In Whetstone, we have installed a new boiler and immersion heater and new electric heaters. We've also made some repairs to reduce heat loss, and now control both lighting and heating with timers.

As a result, in 2019/20 we used 14% less electricity and 12% less gas than in 2018/19.

Responsible consumption

We take our responsibility for managing the impact of our operations and those of our supply chain on the environment seriously.

We are currently working to implement standards for good practice across the Group: on reducing waste and on increasing recycling and the use of recycled, low-impact and recovered materials.

We are also focused on improving efficiency in our energy use across all of the Group's operations. We are pleased that our actions in managing local demand have improved our energy consumption and emissions figures. These also reflect reductions in business travel due to COVID-19.

We have a diverse range of operations, some of which are within highly regulated arenas where the potential for environmental harm is significant. To ensure risks are appropriately managed and impacts minimised, we operate Environmental Management Systems across the organisation. We currently have 23 business units operating ISO14001

accredited EMS. Our management systems allow us to understand, monitor and manage our environmental impacts, while delivering continual improvements.

Climate change impact

We recognise that climate change will result in consequences, not just to our business but to the environment in which we operate. Issues that might affect Babcock include floods, hurricanes, fires and droughts. We identify the risks of climate change on our operations at a contract level and this is reviewed at business unit and sector Board level. We then communicate any material risks to the Audit and Risk Committee on a bi-annual basis.

Having reviewed climate-related risks, we do not believe that there will be direct material adverse impact on our operations over the short or medium term. We will continue to assess emerging climate-related risks and will identify appropriate mitigation activities. Our improvement plans for 2020/21 include performing long-term risk assessments on the assumption of an increase in CO₂.

We also recognise that climate change could result in an increased demand for our services and products in response to climate-related challenges. For example, in our LGE business which provides optimised solutions for the transportation of liquefied gas as an alternative to more polluting fuels and in our aerial emergency services (medical transportation and firefighting activities in Europe, Australia and North America).

Supply chain

Our supply chain has an important part to play in supporting our efforts to reduce emissions. This year, we introduced a Group-wide procurement policy that requires environmental aspects to be taken into account as part of the competitive tender process. We are working closely with our suppliers to reduce packaging where feasible. We have also implemented more recycling and re-use initiatives in order to minimise waste.

Carbon emissions

We recognise the impact that greenhouse gas emissions have on our environment. We are committed to reducing our impact and will review appropriate, accredited targets over the coming year.

Babcock Group Energy Consumption and Emissions

		2017/18	2018/19	2019/20
UK/UK offshore				
Scope 1: Direct emissions from owned/controlled operations	tCO ₂ e	76,614.3	70,515.9	62,754.5
Scope 2: Indirect emissions from the use of electricity and steam	tCO ₂ e	96,251.5	73,416.0	59,721.3
Scope 3: Emissions – business travel, electric transmission and distribution	tCO ₂ e	20,790.8	17,723.2	13,304.4
Total emissions	tCO₂e	193,656.5	161,655.2	135,780.2
Underlying energy consumption used to calculate emissions	kWh	644,939,237.2	595,419,932.2	530,000,509.8

Global (excluding UK/UK offshore)

Scope 1: Direct emissions from owned/controlled operations	tCO ₂ e	105,010.5	94,405.1	107,205.4
Scope 2: Indirect emissions from the use of electricity and steam	tCO ₂ e	8,144.8	7,314.3	4,572.7
Scope 3: Emissions – business travel, electric transmission and distribution	tCO ₂ e	850.1	319.9	361.2
Total emissions	tCO₂e	114,005.4	102,039.2	112,139.3
Underlying energy consumption used to calculate emissions	kWh	446,044,504.7	401,624,794.3	450,404,800.4

Babcock Group Total (UK/UK offshore and Global)

Scope 1: Direct emissions from owned/controlled operations	tCO ₂ e	181,624.8	164,921.0	169,959.9
Scope 2: Indirect emissions from the use of electricity and steam	tCO ₂ e	104,396.3	80,730.4	64,294.0
Scope 3: Emissions – business travel, electric transmission and distribution	tCO ₂ e	21,640.8	18,043.1	13,665.6
Total emissions	tCO₂e	307,661.9	263,694.5	247,919.5
Underlying energy consumption used to calculate emissions	kWh	1,090,983,741.9	997,044,726.4	980,405,310.1
Revenue	£m	4,659.6	4,474.8	4,449.5
Intensity Ratio	tCO₂e/£m	66.0	58.9	55.7

Our emissions data is reported in line with the Greenhouse Gas Protocol Corporate Accounting & Reporting Standard under the 'Operational Control' approach. Figures for UK operations follow conversion factors published by BEIS. Non-UK operations use emission factors applicable to the fuel source and location. Appropriate conversion factors have been used to calculate the underlying energy consumption figures. Scope 1, 2 and 3 sources have been divided by the annual revenue to provide the intensity ratio (tCO₂e per £m). Figures for prior years have been adjusted to include data unavailable last year, and figures for this year include an element of estimated data. Certain data, estimated to be immaterial to the Group's emissions, has been omitted as it has not been practical to obtain (operations in Oman, South Korea, Canada and Australia). Metering and monitoring improvements are being implemented to capture these data streams.

Environmental

Responsible consumption continued

Sustainable buildings

Across the organisation we continue to develop and improve our built estate and we strive to achieve excellent sustainability credentials with all developments. Sustainability considerations are at the core of the design and decision making process. We aim to deliver high quality assets which meet the current and future needs of our staff and customers whilst minimising our environmental impacts.

In 2019 we opened the Babcock Technology Centre in Bristol, which houses 850 people and is home to staff from across all four of our sectors. The accommodation is over five floors and the facilities include a gym and canteen. The building was designed and built to Building Research Establishment Environmental Assessment Method (BREEAM) Excellent standard, as were the recent new buildings at our sites in Devonport and Rosyth.

This year RAF Valley and RAF Cranwell also achieved Defence Related Environmental Assessment Method (DREAM) accreditations for construction.

Zero to landfill

All Babcock businesses are committed to minimising waste across their operations. For example, our dockyard in Rosyth has been zero to landfill for a number of years now.

Last year our power business in the UK, Babcock Networks Limited, achieved 100% diversion of construction waste from landfill across all overhead line projects, equating to 39,462 tonnes.

Over the coming year, we will improve our recycling and re-use activities. We will also assess the opportunity to attain zero to landfill in other business areas.

Waste management

We also actively help our customers meet their waste management targets.

Babcock manages the rental leases for the UK MOD's white fleet, and is supporting the MOD and the UK Government in the transition to 'Road to Zero', which includes a commitment to convert 25 per cent of combustion engines to ultra-low emission by 2022, and 100 per cent by 2030.

An example of effective management of emissions can be seen in our Type 31 build work, where we are transporting steel, rebar and concrete to Rosyth by sea instead of by road. This reduces the number of lorries on our roads by approximately 3,500 over the three month-period it would have taken to deliver the material, thereby reducing CO₂ emissions, noise impact and enhancing road and site safety.

At RAF Brize Norton, we challenged well-established processes to make significant environmental improvements to our use of water. Demonstrating that we were able to use waste potable water to conduct hyper-sterilisation tasks has reduced water wastage by almost 500,000 litres per year.

Protocols have been developed and validated which reduce the fluid used in testing and preparing the anti-icing delivery vehicle used by AirTanker from an average of 80,000 litres a year to around 30,000 litres.

These improvements have had a direct impact on our local environment, as previously all applied de-icing fluid and unused water went into the RAF Brize Norton ground water system.



Protecting biodiversity

Babcock's work to refurbish the overhead power line from Landulph to Exeter involved going through a number of Sites of Special Scientific Interest.

The area included the habitats of wildlife such as great crested newts, dormice and protected birds, and even a goshawk nest.

Our environmental advisor identified at an early stage that the ecological surveys provided to us lacked scope and detail, and so we took a proactive approach to make sure we could protect the habitats without incurring undue delays.

We deployed a specialist ecologist who conducted additional surveys and consulted with key stakeholders like Natural England.

We used the latest methodology – Environmental DNA surveys – and additional dormice surveys, and used these to plan our work, calculating the permanent and temporary habit impact at the design stage.

We even liaised with a goshawk specialist and with the agreement of the Forestry Commission we were able to do the essential work safely and without any impact to the birds of Haldon Forest.