

amec  
foster  
wheeler

# Carbon management

In 2016 we fulfilled our promise to review our carbon reduction targets in line with limiting climate change to two degrees change following on from the agreements made at COP21 (the Paris Climate Conference). In 2017 we will focus our efforts on modelling how these reductions will be achieved.

During 2015 we re-baselined our carbon emissions following the acquisition of the Foster Wheeler business in late 2014. 2016 was the first year we collected a full data set from the whole business using our global carbon reporting system. This has enabled us to continue to improve the accuracy of our data over this period.

The 12-month period to 30 September (the carbon reporting year), rather than the calendar year, has been used. This ensures actual data can be reported in our Annual Report and Accounts in line with reporting timescales required for mandatory carbon reporting, even for those regions where energy/fuel usage is more difficult to access. By reducing reliance on estimation, a more accurate footprint can be provided in a timely manner.

### Carbon performance

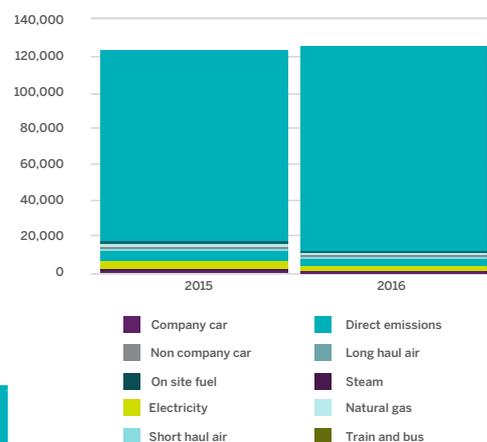
Our absolute emissions for our 2016 carbon year were 1,251,252 tonnes of CO<sub>2</sub>e which represented a slight increase in overall emissions of 0.2% from our 2015 baseline.

### Benchmark indicators

To help us monitor emissions as our business changes over time, we use three benchmark indicators below;

	2015*	2016
Per employee	31.75	33.94
Per £1m revenue	228.88	220.21
Per MWh generated**	0.94	0.90

Amec Foster Wheeler 2016 emissions versus our 2015 baseline



Note:  
\*Includes a full carbon year of data for both AMEC and Foster Wheeler representing full baseline for 2015

\*\*MWh generated from our two power generation sites in Chile and Martinez



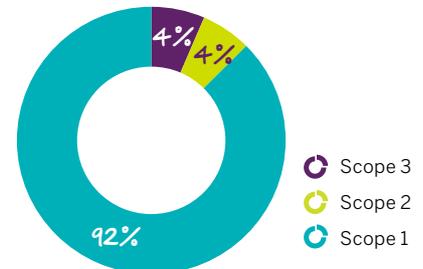
# Carbon management



amec  
foster  
wheeler

## 2016 emissions by Scope

	2015	2016
Scope 1	1,085,148	1,148,118
Scope 2	68,540	49,799
Scope 3	62,882	53,335



### Scope 1 ↑ 2.8%

The main source of our Scope 1 emissions are direct emissions from our power generation plants in Chile and Martinez, US – together these make up 97% of our Scope 1 emissions. The remainder is made up of company car, natural gas from our offices and on-site fuel supplying power generators and other site equipment.

### Scope 2 ↓ 26%

Scope 2 emissions are associated with the electricity purchased and utilised for our office space and for the manufacturing plants of our GPG business.

### Scope 3 ↓ 15%

Scope 3 emissions are associated with business travel, including air and rail travel as well as mileage travelled in personal vehicles and hire cars.

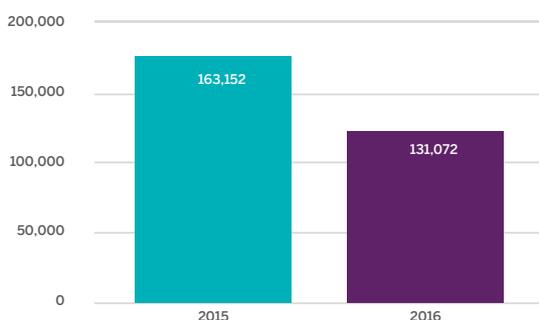
## Power Generation

Amec Foster Wheeler owns/operates two power generation facilities – PetroPower Energia Limitada in Chile and Amec Foster Wheeler Power Systems – Martinez in California. Emissions of these two plants make up 97% of the total emissions for 2016, and overall rose during 2016 by 3% from 2015 levels. This increase

in absolute emissions was due to increased output at both plants with electricity generation rising 5% and steam by 17% overall. The tonnes of emissions per MWH output shows a reduction from 2015 levels, indicating that although overall emissions went up, our emissions were less per MWH produced.

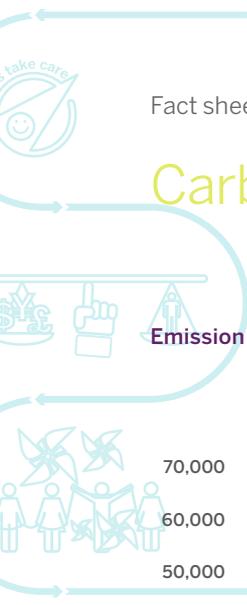
Due to the impact that the emissions from our two power generation sites has on our total emissions, the remainder of this factsheet focuses on emissions by reporting type not including power generation. This allows us to represent the reporting and reduction efforts of all other emissions sources more effectively.

### Emissions of business operations (excluding power generation)



Emissions of our business operations have **reduced by 19%**

Our emissions per employee fell from 4.15(t) in 2015 to 3.71(t) in 2016; over a **10% reduction**.

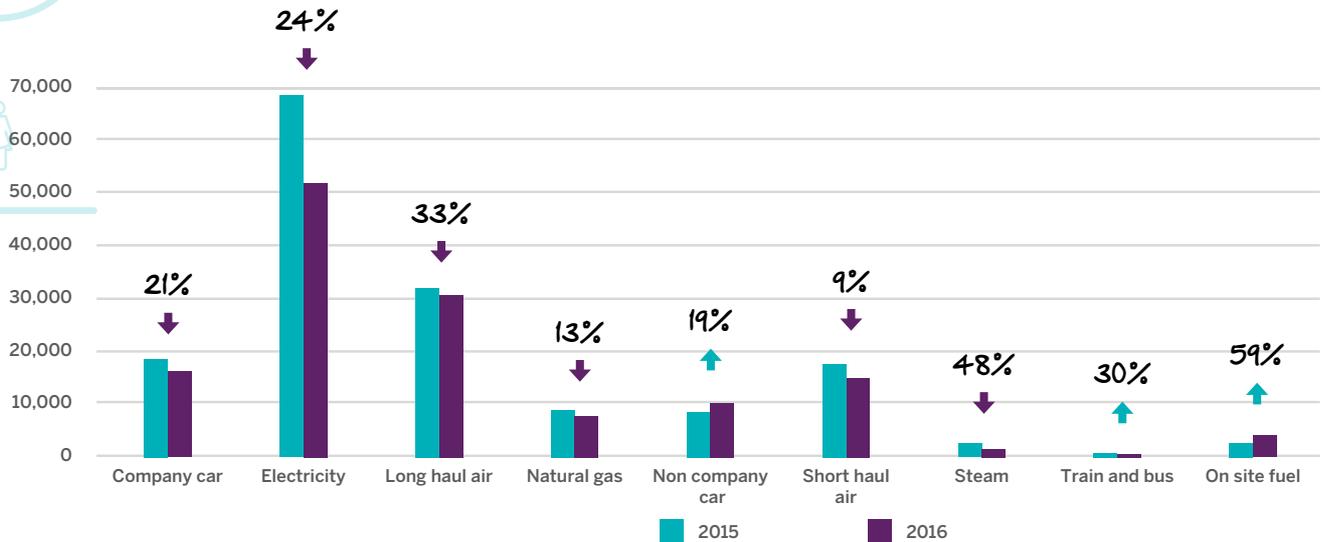


# Carbon management



amec  
foster  
wheeler

Emission Type (t) 2015 vs 2016



Significant reductions were made in emissions resulting from steam, natural gas, long and short haul air, electricity and company car mileage.

## Electricity

The largest reduction in emissions from 2015 levels was seen from the electricity used by fixed office locations, a reduction of over 16,000t of CO<sub>2</sub>e. There was specific focus in this area in 2016 through three key areas:

- Continued focus to consolidate office space in cities where we have multiple facilities.
- Introduction of an Energy Management Procedure in the UK focusing on recommendations and actions from ESOS reports published late 2015.
- Continued focus and efficiency improvements implemented using our global 5 star efficiency programme. (see [5 star office efficiency case studies](#) for more details).

## On-site fuel

The most significant percentage rise in emissions came from the use of on-site fuel which we used for power

generation on our temporary sites and for plant and equipment. This increase follows a rise in the number of Transmission and Distribution projects in the UK with projects in temporary locations rather than fixed sites.

## Business travel

We continue to record the emissions from our business travel, including air, rail and personal vehicles miles. An updated travel policy which was rolled out in 2015 is now well embedded within the business, which sees travel requests regularly refused and challenged.

Skype has become one of the most widely used tools around the business and is now the first option in place of travelling. We have witnessed a drastic reduction in the number of people travelling for meetings, resulting in a reduction in air and rail travel as well as company and non-company car mileage.

Emissions from train and bus use also rose, indicating a positive change in behaviour from employees who are thinking differently about their travel arrangements.

Recording travel data has always been challenging, with travel being booked through various

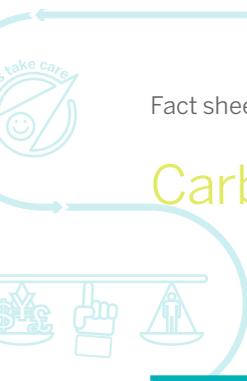
organisations. In 2016 we consolidated the number of travel providers utilised globally and will look to take this even further in 2017. Each consolidation results in a more simplistic and efficient data collection process.

## Reporting

We continue to report externally on our performance in both legal and voluntary carbon reporting requirements. In 2016 we achieved a rating of C on the Carbon Disclosure Project.

We also report our carbon emissions under a number of pieces of UK legislation:

- The CRC Energy Efficiency Scheme;
- The Energy Savings and Opportunities Scheme;
- The Companies Act 2006 (Strategic and Directors' Reports) Regulations 2013.



# Carbon management



amec  
foster  
wheeler

Year	2020	2025	2030	2035	2040	2045	2050
Percent absolute emissions reduction	24%	42%	56%	66%	74%	80%	85%
Target emissions (tCO <sub>2</sub> e)	950,200	724,600	552,700	421,500	321,500	232,200	187,000

## Carbon Reduction Planning

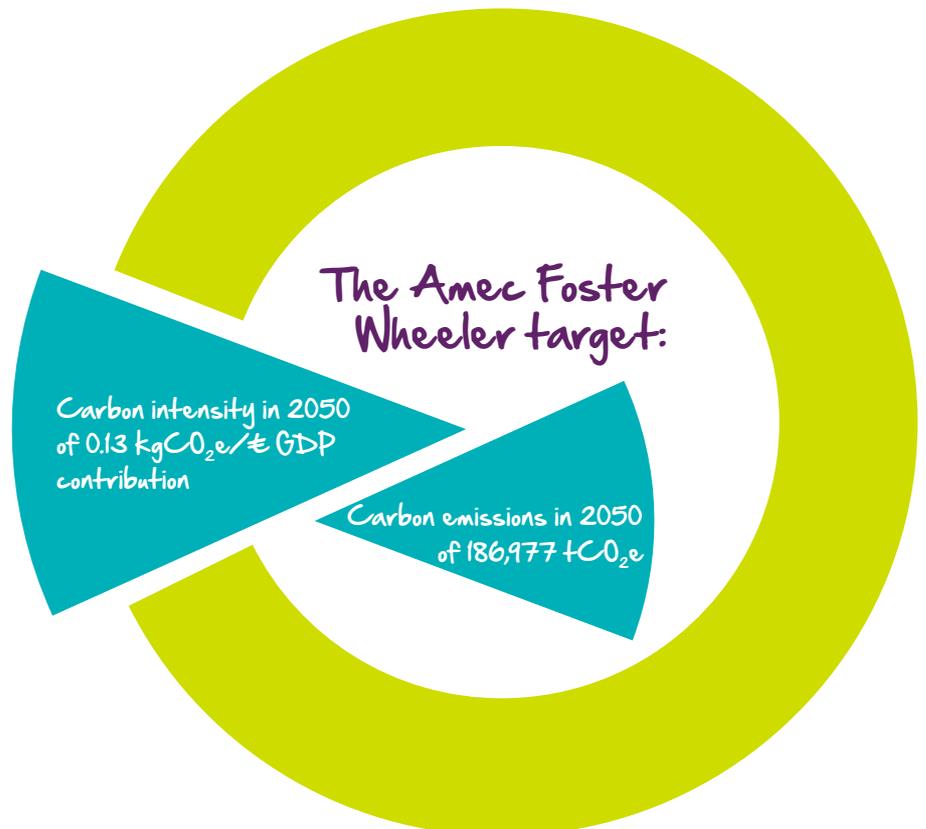
Following the Paris Agreement, in which 177 countries committed to keep the rise in global average temperature 'well-below two degrees celcius', we chose to investigate an emissions target in alignment with climate change science. The benefit of setting a science-based target is to be proactive in the way that our commitments are moving with the aim of giving the company a competitive advantage in the future.

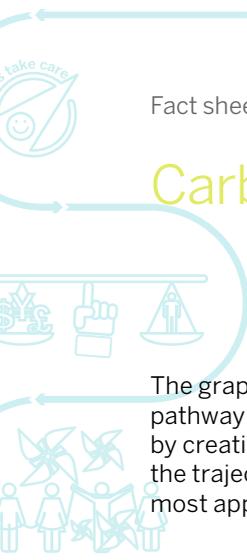
Following review of the seven methodologies recommended by Science Based Targets Initiative (SBTI), the C-FACT (Corporate

Finance Approach to Climate-Stabilizing Targets) methodology was selected as the most appropriate to calculate Amec Foster Wheeler's science-based target. The C-FACT methodology recommends that companies decrease their emissions in line with scientific and policy climate stabilisation targets in proportion to their relative contribution to global GDP.

- Through carrying out the C-FACT process, a target carbon intensity for 2050 of 0.13 kgCO<sub>2</sub>e/£ GDP contribution was calculated. This was calculated using a 2015 baseline of 1,246,512 tCO<sub>2</sub>e.

- Through this methodology we have annualised this goal in order to translate the calculated carbon intensity reduction goal to corporate-level absolute targets. This breaks down the change in carbon intensity into yearly emission targets and creates a pathway for Amec Foster Wheeler to reach its target of an 85% reduction in emissions by 2050. By annualising the target, we derive a series of yearly targets to understand what reductions need to be made along the way.





Fact sheet

# Carbon management



amec  
foster  
wheeler

The graph below shows a smooth pathway to the 2050 target, however, by creating targets at key milestones, the trajectory will be followed in the most appropriate way for Amec

Foster Wheeler. 2017 will see the business focus on developing a plan that will be implemented to meet our 2025 target.

We will continue to monitor and report our carbon emissions and our progress towards our set targets going forward.

## Emissions Reduction Pathway

