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THE ECONOMIC IMPACT OF DRAX GROUP IN THE UK

OCTOBER 2018



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October 2018

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EXECUTIVE SUMMARY

Drax Group plc is a large British energy company, encompassing three principal activities: generating electricity; providing electricity, gas and energy services to businesses; and processing compressed wood pellets for use in electricity production.

Its main generation asset, Drax Power Station, is the largest in the UK, contributing six percent of all electricity production in the country. The station's major decarbonisation project, that has taken place over recent years, has seen half of its six generation units converted to burn compressed wood pellets in place of coal. About two-thirds (65 percent) of its electricity output is now provided by these biomass units, a volume of energy that amounts to around 15 percent of the UK's entire renewable electricity supplies in 2017.¹ A fourth coal unit was converted to biomass in August 2018, which will further boost the proportion of its energy generated via renewable sources.

Haven Power and Opus Energy are leading retail companies that are a part of Drax Group, and together supply energy to over 376,000 British business meters. These companies work to promote energy efficiency and sustainability among other businesses, including making 100% renewable power available to supply customers.

Through its operations and investments, Drax Group supports a significant volume of employment and economic activity across the UK. This report quantifies Drax Group's economic contribution in 2017, encompassing the direct, indirect and induced impact of the Group's activities.

In total, Drax Group's operations contributed over £1.6 billion to UK GDP in 2017. This figure includes the value created by the Group's production and supply of wholesale energy, the activity across the Group's supply chain that is attributable to its demand for inputs, and the wages that its staff (and suppliers' staff) spend in the wider consumer economy.

One-quarter of this GDP impact, equivalent to £431 million, was generated in the Yorkshire and the Humber region, home of Drax Power Station. The Group also contributed a sizeable economic impact in the regions where Haven Power and Opus Energy are based. Their operations helped to generate a £658 million GDP impact (40 percent of the Group's total in 2017) across the East Midlands, East of England, South East and Wales.

In addition to these contributions to economic output, 17,500 jobs across the UK were supported by Drax Group in 2017. One-third of this employment impact, equivalent to 5,800 jobs, was felt in the north of England, highlighting the Group's importance to employment across the region.

15%

Of Britain's renewable power produced by Drax Power Station

376,000

Business meters powered by Haven Power and Opus Energy

£1.6 billion

Drax Group's total GDP contribution in 2017; supporting 17,500 jobs

¹ Based on total generation of renewable electricity in the UK over the twelve months to Q3 2017.

1. INTRODUCTION

This report sets out the results of Oxford Economics' assessment of Drax Group's economic contribution to the UK during 2017. The report is the latest analysis in Oxford Economics' programme of research for Drax Group, that has quantified the Group's economic impact in both 2015 and 2016.²

1.1 DRAX GROUP

Drax Group is a large British energy company, that is helping to sustain the UK's transition towards a low-carbon future. In recent years, half of Drax Power Station—a nationally significant energy asset—has been converted to use sustainably-sourced wood pellets instead of coal. In doing so, it has become the single largest source of renewable power in the country. A fourth coal unit was converted to biomass in August 2018, further elevating the power station's status as the largest renewable generator in the UK.

During 2017, Drax also acquired Opus Energy and consolidated this business into its operations. This consolidation allows Drax Group to expand its offer of renewable and sustainable power to small and medium-sized businesses across the UK.

The Group's three principal activities are generating electricity; supplying energy and energy services to businesses; and making compressed wood pellets for use in electricity production. Drax has several businesses working across the energy sector in the UK, that are considered in this report. We present results broken down into the following entities:

- **Drax Power**, Drax's generation business that owns and operates Drax Power Station in North Yorkshire. In our analysis, the activities of the Group's head office are included within this entity;
- **Haven Power**, a leading supplier of energy to industrial and commercial users; and
- **Opus Energy**, one of the largest suppliers of energy to small and medium-sized enterprises (SMEs) in the UK.

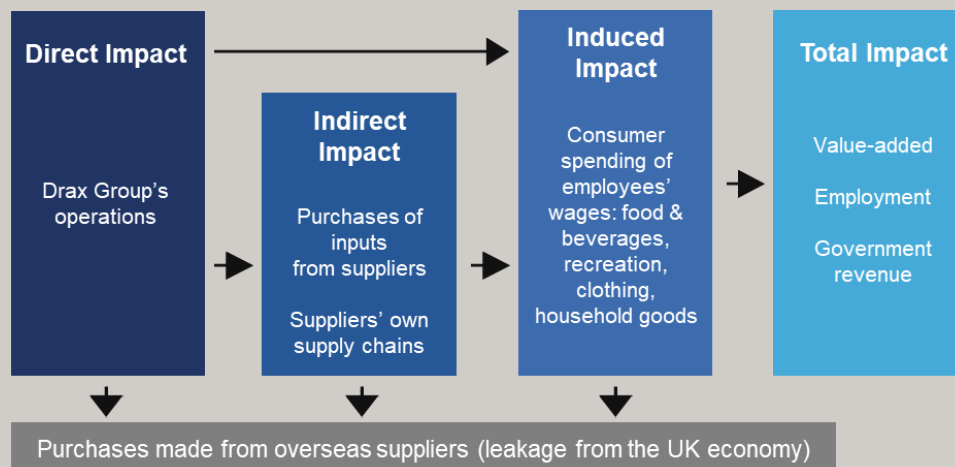
² The economic impact of Drax Biomass Inc., Drax's subsidiary based in the United States, falls outside the remit of these studies.

METHODOLOGICAL OUTLINE

Oxford Economics assessed the economic benefits of Drax Group using a standard means of analysis, called an economic impact assessment. Three 'core' channels of impact are considered: termed the direct, indirect and induced impact. These can be understood as follows:

- Its **direct impact** relates to the Group's own activities, such as the GDP it generates and its direct employment;
- Its **indirect impact** encapsulates the activity and employment supported in the Group's, or contractors' supply chains as a result of their procurement of goods and services; and,
- Its **induced impact**, comprising the wider economic benefits that arise when employees within the Group and contractors, and their supply chain spend their earnings, for example in local retail and leisure establishments.

Fig. 1: The channels of Drax Group's economic impact



These economic impacts can be measured in one of three ways:

- GDP, or more specifically, the Group's gross value added (GVA) contribution to GDP;
- Employment meaning the number of people employed, measured on a headcount basis; and,
- Tax revenue, the estimated fiscal contribution resulting from corporate activity and employment sustained by the Group.

The calculations undertaken to quantify these impacts draw upon data supplied by Drax Group. The modelling is conducted using an Input-Output (I-O) based model of the UK economy, and regional modules describing the economies of its constituent nations and regions. This model was constructed by Oxford Economics, using macroeconomic, employment and tax data published by the Office for National Statistics (ONS) and HMRC.

2. RESULTS

2.1 DIRECT IMPACT

The activities of Drax Group contributed **£355 million to UK GDP** during 2017. This figure encompasses the gross profits it earned through its operations, and the gross wages paid to its workers. This figure represents an annual increase of 18 percent, relative to 2016.

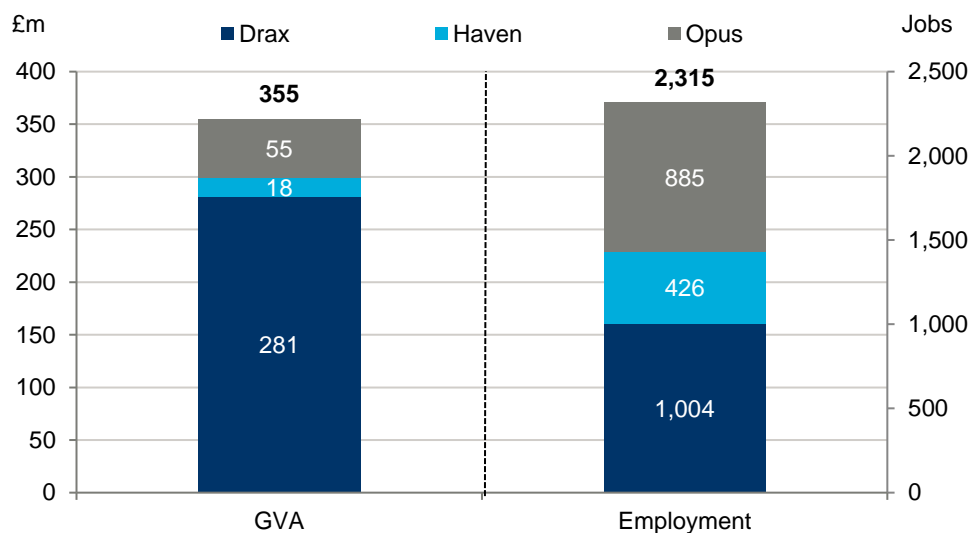
The Group also employed some **2,315 workers in 2017** throughout the UK, measured as the average of monthly employment levels during the year.

£355m

Drax Group's direct contribution to GDP in 2017

Along with a direct jobs impact of 2,315 workers

Fig. 2: Direct impact of Drax Group, by entity, 2017



Source: Drax Group, Oxford Economics

In addition to these GVA and employment contributions, the Group directly generated around **£98 million in tax revenues**.

This total is made up of Corporation Tax and business rates paid by the Group, and product-specific taxes (such as carbon costs and Waste Levy) levied on the Group's activities. Also included are the labour taxes of its direct workforce, such as income tax, and employers' and employees' National Insurance Contributions (NICs).

2.2 INDIRECT IMPACT

The Group's indirect impact on the UK economy is driven by its procurement of goods and services from other domestic businesses. In order to avert double-counting, this indirect impact excludes the spending between the various entities of Drax Group.³ The economic benefits of this spending are already captured within the direct impact, discussed above.

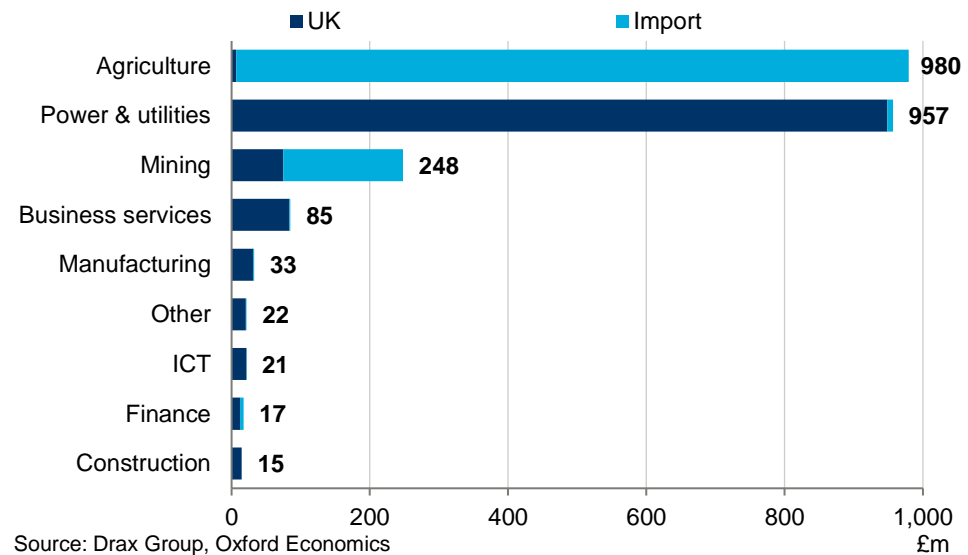
³ During 2017, the Group completed the consolidation of Opus Energy. One consequence of this has been that many transactions (that would have otherwise driven some of the indirect impact), were replaced by intra-group transactions, thereby restraining the Group's indirect impact, relative to 2016.

Drax Group’s external spending reached £2.4 billion in 2017, including £1.2 billion that was with UK-based suppliers.

Fig. 3 (below) sets out the industries and geographies across which this external procurement was distributed.

£1.2 bn
Drax Group’s spending with UK suppliers during 2017
Excluding purchases between Drax Group companies

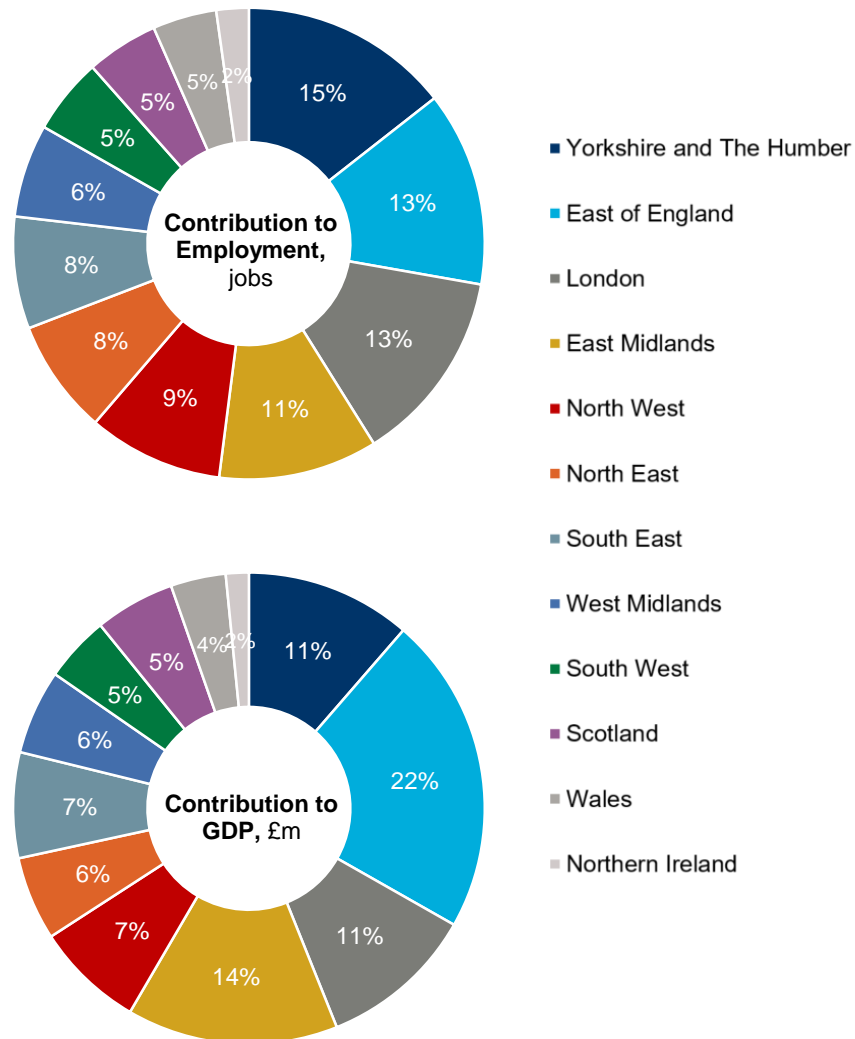
Fig. 3: Drax Group's total procurement expenditure, by sector, 2017



In order to meet the intermediate demands of Drax Group, these businesses make purchases from their own suppliers, and so on down the supply chain. The sum of all these supply chain interactions produces the indirect impact, that ripples out across the regions and nations of the UK.

The Group’s indirect impact supported £921 million in GVA during 2017, while supporting over 9,300 jobs throughout the UK. The Group’s indirect jobs contribution is four times as large as its direct employment, pointing towards the capital-intensive nature of its activities. This illustrates that Drax Group’s spending within the UK is with predominately with relatively more labour-intensive industries. Fig. 4 (overleaf) sets out the geographic distribution of the indirect GVA and employment impacts.

Fig. 4: Regional distribution of Drax Group's indirect impact, 2017



9,300

Jobs supported indirectly by Drax Group during 2017

Alongside a GDP contribution of £921 million

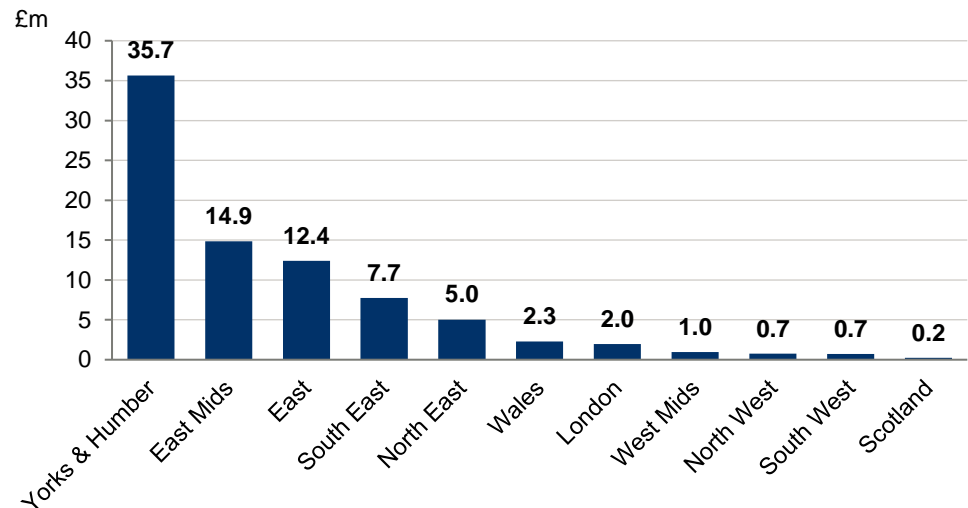
Source: Drax Group, ONS, Oxford Economics

2.3 INDUCED IMPACT

Drax Group paid £107 million in gross employee compensation during 2017. This figure encompasses wages and salaries, pensions contributions, share-based payments and compensation costs (where relevant).

This remuneration supported household consumption across all regions of the UK, as shown in Fig. 5 (overleaf). The following analysis rests upon the simplifying assumption that salary income is spent in the region where the recipient employee is resident.

Fig. 5: Gross salaries paid by Drax Group, by region of employee residence, 2017



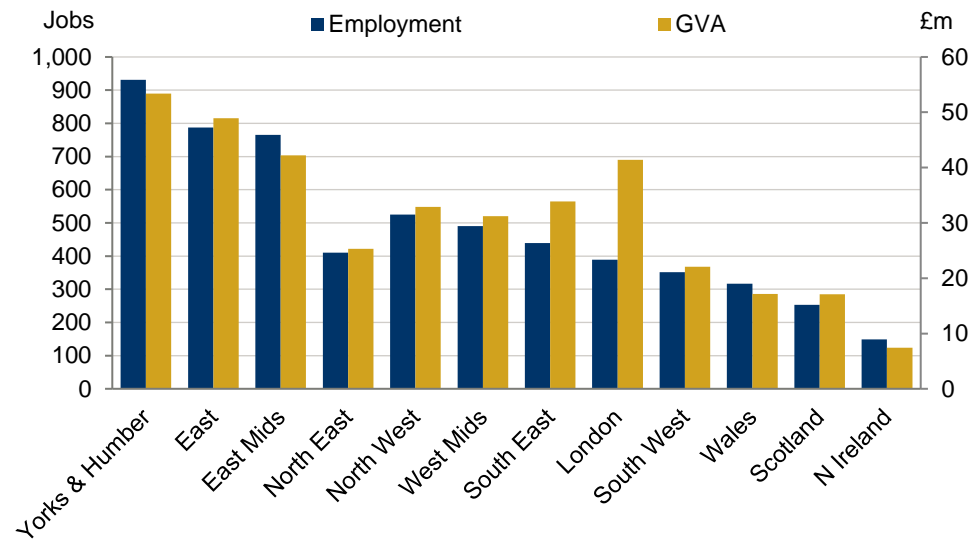
Source: Drax Group, Oxford Economics

A portion of these salaries are spent in the consumer economy, for example in retail and leisure outlets. In addition, the wages paid to employees of firms within Drax Group's supply chains also support further consumption spending. Further, in order to meet this induced demand, retail and leisure businesses draw upon their supply chains, producing a further supply-chain effect that is also a part of Drax Group's induced impact. These factors explain why the Group's induced impact is much broader (in geographic terms) than the distribution of its direct wage payments.

We estimate that Drax Group's induced GVA impact reached £373 million in 2017. Its induced impact also supported 5,800 jobs across all nations and regions of the UK, as illustrated in Fig. 6 (overleaf).

This induced activity was also associated with tax revenues of £114 million. This sum encompasses all the taxes on profits, wages and procurement discussed previously; while also including the VAT accrued as a result of Drax Group's induced consumption impact.

Fig. 6: Indirect impact of Drax Group, by region, 2017

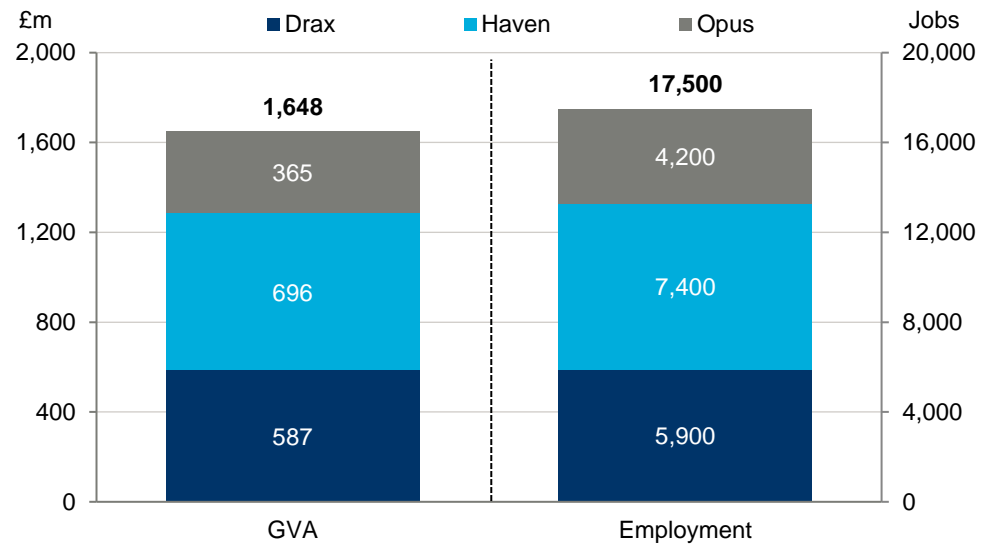


Source: Drax Group, ONS, Oxford Economics

2.4 TOTAL IMPACT

By adding the three channels discussed above, we arrive at our estimates for the total impact of Drax Group’s activities during 2017. This can be considered the Group’s ‘footprint’ on the UK economy in that year.

Fig. 7: Total impact of Drax Group, by entity, 2017

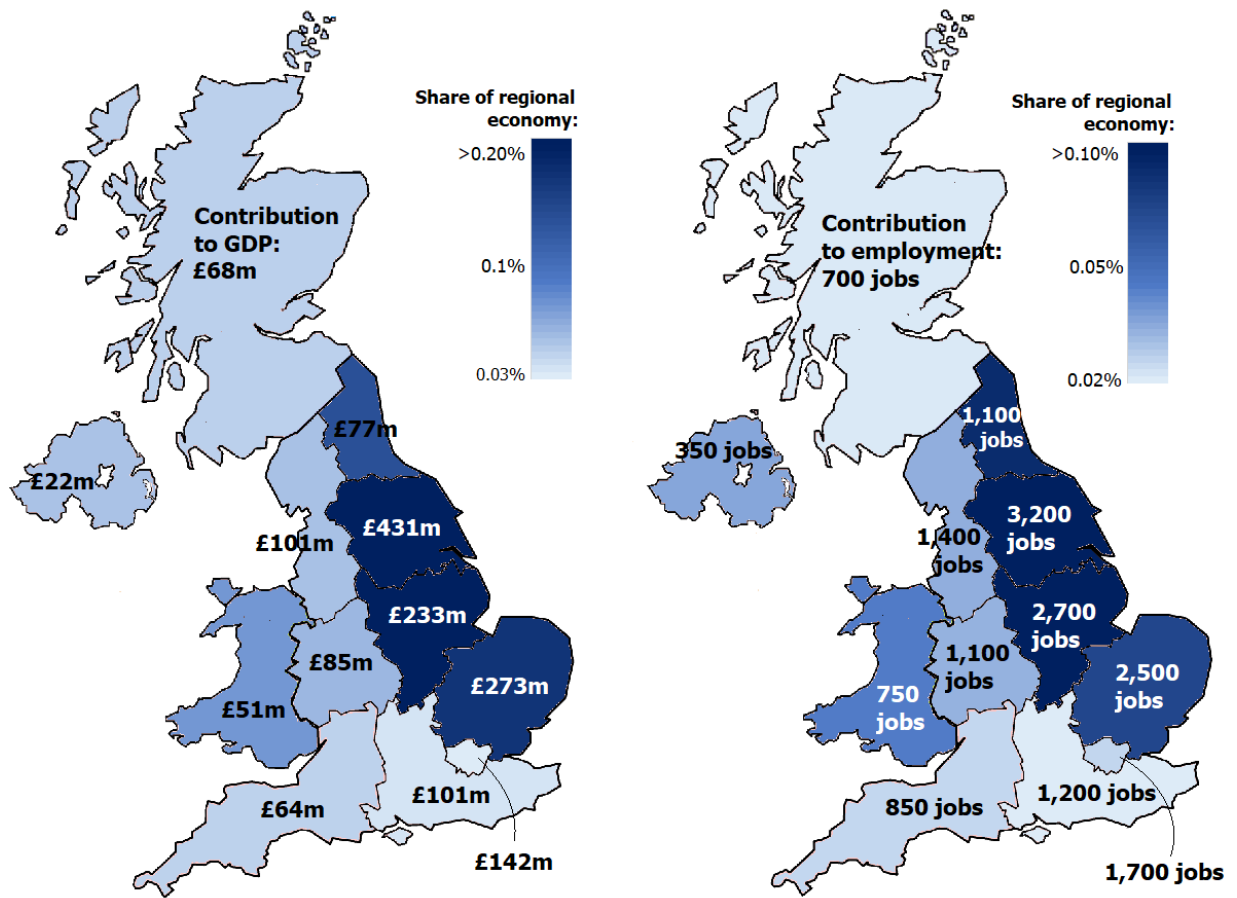


Source: Drax Group, ONS, Oxford Economics

£1.6 bn
Total GDP contribution of Drax Group in 2017
Accompanied by an induced employment impact of over 17,500 jobs

We estimate that Drax Group’s activities generated around £1.6 billion in GVA during 2017, whilst supporting around 17,500 jobs. In doing so, the Group supported an estimated £387 million in revenues for the Exchequer.

Fig. 8: Drax Group's total impact across the UK, 2017





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