

WASTE EXPORT: BREXIT BRIEFING NOTE

JUNE 2018



The RDF Industry Group is comprised of 31 members spanning the RDF supply chain.

RDF stands for 'refuse derived fuel'. It is a generic term used to describe non-recyclable mixed waste that has undergone some processing that allows it to be burnt as a fuel to produce energy in an energy-from-waste incinerator.



Refuse Derived Fuel Movements Must Continue Unhindered Post-Brexit

The UK RDF export industry began in 2010 and is now worth circa **£0.5 billion annually**.¹ In 2016, almost 14% of UK residual municipal, commercial and industrial wastes were treated using spare energy-from-waste capacity on the continent. RDF production supports over 6,800 additional jobs here in the UK. The **market** and **supply chain** for RDF export is now **well-established** and forms a vital and flexible part of the UK's waste management system.

The RDF Industry Group has members drawn from across the RDF supply chain, including major waste management contractors and operators from both the UK and Europe. The Group is **calling on the UK Government** to ensure that RDF export **to Europe** is able to retain its **important role** in the UK's waste management and recycling system without hindrance.

Any operational and/or legislative barriers as a result of the UK exiting the EU are likely to have **negative consequences** for the environment, for the development of future waste policy and for the economy.



Image courtesy of AEB

RDF export...

...is an industry worth annually,

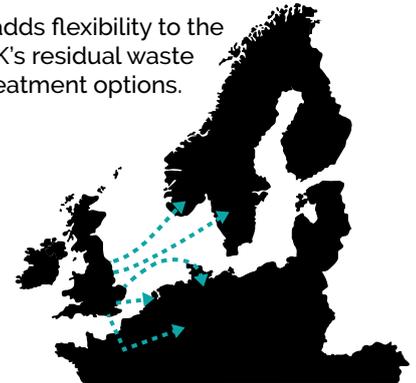
£0.5 billion



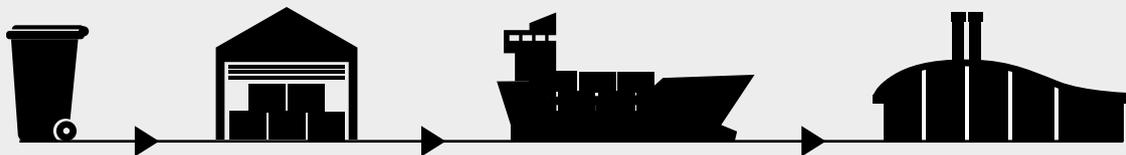
...saves **700,000** tonnes of CO₂e emissions annually. This is equivalent to



...adds flexibility to the UK's residual waste treatment options.



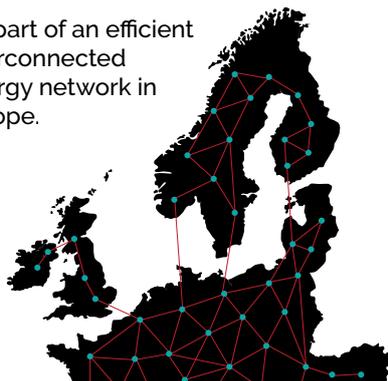
Waste is turned into RDF before being stored, exported and treated in an energy-from-waste facility.



...contributes to the diversion of recyclate from residual waste.



...is part of an efficient interconnected energy network in Europe.



...supports over 6,800 jobs in RDF production alone.

¹ Based on 2016 export figures.



The environmental and economic arguments for RDF export are clear. If Brexit stopped the trade, it would mean up to 3.6 million tonnes more waste going to landfill in the UK each year.² That would be to disregard the waste hierarchy, worsen the environmental impact, increase costs and put jobs at risk.

In order to allow RDF export to continue after Brexit and ensure that its benefits continue to be realised, the UK Government and EU must:

1 Maintain the current legislative framework that allows RDF to be exported, including maintaining the UK's commitment to wider international agreements on transfrontier shipment of waste. RDF export is one of the most closely regulated areas of waste management, and is one of the few waste treatment options covered by a financial bond available to the regulator. Maintaining regulatory alignment with the EU will provide clarity for waste operators and ensure RDF exports continue to provide a safe and reliable management option for the UK's residual waste.

2 Ensure that any new customs process does not impede the export of RDF at the UK's borders, and that there are sufficient staff and resources to implement new customs processes.³ RDF is exported via ports and the Channel Tunnel. It is important that any new administrative systems take account of the current export notification process. Operational disruption should be minimised so as to avoid delays that could lead to: environmental concerns arising from extended RDF storage; additional waste management costs such as temperature monitoring; and contractual issues with the supply to European off-takers.

3 Ensure that a trade deal is reached with the EU (and EEA) which provides for a 0% tariff on RDF export. Because UK waste producers pay to have RDF incinerated on the continent, there is some debate over whether RDF export is to be treated as the export of goods to the EU or the import of a service. If, as appears likely, RDF is considered to be 'goods', then, in the absence of a deal, a World Trade Organisation (WTO) Most Favoured Nation Rate of 6.5% may apply. Several countries have reached agreements with the EU through the WTO's Generalised System of Preferences that ensure a 0% tariff on exports of waste, including Switzerland, Ukraine, Albania, Montenegro, Bosnia and Herzegovina, Macedonia and Serbia.⁴ Also, under EU Regulation No 1186/2009, goods of negligible value from third countries into the EU are free of import duties.⁵ RDF should be considered to be a good with a negative value as producers have to pay for it to be treated.⁶

Case Study

In 2014 the EU entered into an association agreement with Ukraine. This agreement came into effect in 2016, and established conditions for enhanced economic and trade relations by setting up a free trade area. In conformity with the WTO's General Agreement on Tariffs and Trade system, customs duties on the import of goods into the EU from Ukraine were abolished.

² Data sourced from the Environment Agency, Natural Resources Wales, Scottish Environment Protection Agency and Northern Ireland Environment Agency.

³ HMRC estimates that in a no-deal scenario, an additional 3,000 – 5,000 customs staff would be needed. *House of Commons Committee of Public Accounts, November 2017, Brexit and the future of Customs, Second Report of Session 2017–19.*

⁴ <http://madb.europa.eu/madb/euTariffs.htm>

⁵ Article 23 describes 'goods of negligible value' as being goods with an intrinsic value of less than EUR 150 per consignment.

⁶ Association Agreement between the European Union and its Member States, of the one part, and Ukraine, of the other part.

Why is Treating UK RDF in Other EU Countries Beneficial?

It Provides Environmental Benefits, Reducing Climate Change Emissions



Sending RDF to other European countries for treatment is **better overall for the environment** than sending the waste to landfill - its likely fate if it remained in the UK. Over 700,000 **tonnes of CO₂e emissions were saved** in 2016 by exporting RDF for treatment in Europe instead.⁷ This is equivalent to taking over 740,000 cars off the road.⁸

Waste management accounts for 4% of UK CO₂e emissions, with landfill being the largest contributor.⁹ Increasing landfilling by more than a third would make it more difficult to meet the **legally binding emissions reduction targets** set by the Climate Change Act 2008. Keeping waste out of landfill will contribute to any Nationally Determined Contribution that the UK makes to the Paris Climate Change Agreement.

It Allows the UK's Waste Strategy to Be Developed

In both the short and the long term, RDF export allows a significant amount of material to be **moved up the waste hierarchy**, a principle that is enshrined within UK law.

There is currently more residual waste than there is waste treatment infrastructure in the UK. This means that the waste that is exported would otherwise be landfilled.

As the UK moves towards a more circular economy, decisions on the type and scale of waste infrastructure required become more important. RDF exports provide a **flexible treatment route** which allows greater freedom to prepare and implement policy decisions. Export contracts are relatively short term, and so are easier to 'switch on and off' to balance the amount of treatment capacity needed. These contracts provide a safety valve for waste management.

This is particularly important at a time when the UK is developing its own approach to waste policy outside of the EU. England, in particular, has yet to set a longer-term direction for waste policy beyond 2020; by contrast, Wales and Scotland

The environmental benefits are augmented by sending RDF to **good quality, efficient** treatment facilities in Europe. In addition to generating electricity, many have industrial or domestic users for the **heat** they produce. Whilst exported RDF travels further than it would if it were going to landfill, typically transport only accounts for 3% of total CO₂e emissions from the whole waste treatment process. Even when RDF is shipped as far as Sweden, this figure only rises to 4%. Indeed, many ships which take RDF to the continent are 'back hauling', in which case **emissions from shipping are less than 1% of the total**.¹⁰ The transport emissions are therefore more than offset by the treatment savings.



have both set 70% recycling targets for 2025. The flexibility of RDF export allows the UK to make policy choices that are not unduly constrained by residual waste infrastructure investments. The country can **transition at its own speed**, while dealing with residual waste in the most **environmentally sound way** in the interim.

RDF exports will help the UK to meet the **vision** outlined for residual waste in the UK Government's 25 year environment plan, allowing waste policy to be set on a timeframe that spans the Brexit transition period and the definition of a post-EU future.

'The actions set out in this Plan will help us build on this to ensure that the value of residual waste as a resource is fully realised.'

UK Government 25 Year Environment Plan,
2018

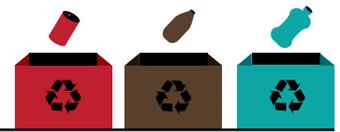
⁷ Detailed assumptions used in the modelling of these scenarios are included in Appendix 2 of Eunomia (2015), *RDF Export: Analysis of the Legal, Economic and Environmental Rationales*, Report for RDF Export Industry Group. Based on 2016 export tonnages and 74% of export tonnage to combined heat and power facilities.

⁸ Based on 0.997 tonnes of CO₂e per car per annum, assuming 5,079 miles per annum from *Department for Transport, 2017, National Travel Survey: England 2016* and 122g of CO₂e emissions per km for newly registered cars in 2015 from *Department for Transport, 2015, average CO₂e emissions of newly registered cars, Great Britain*.

⁹ Department for Business, Energy & Industrial Strategy, 2016 UK Greenhouse Gas Emissions.

¹⁰ Eunomia (2015), *RDF Export: Analysis of the Legal, Economic and Environmental Rationales*, Report for RDF Export Industry Group.

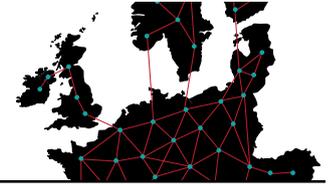
It Complements High Recycling Rates



RDF production and treatment **contributes to the diversion of recyclate** from residual waste. When 'black bag' residual waste is turned into RDF, there is the opportunity for waste to be sorted and material which can be diverted to recycling removed. If the material was sent to landfill in the UK, such sorting would rarely take place.

Recycling processes themselves produce residues which cannot be recycled. RDF export provides a **viable**, and **commercial**, outlet for this residual waste.

It Contributes to the Efficient Generation of Energy, Decarbonising Interconnected Energy Networks

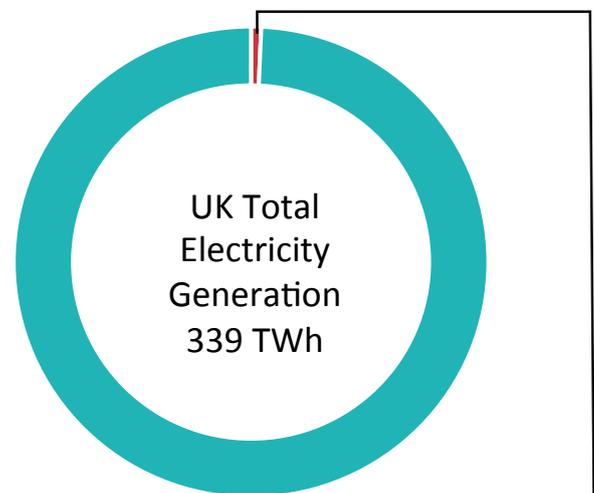


Given how we currently generate electricity and heat, incinerating RDF displaces more carbon intense energy generation methods and contributes to the **decarbonisation of interconnected energy networks**. This is because a portion of the energy which is generated from RDF is classed as **renewable energy**, owing to the biomass content of the waste.

Some commentators raise concerns about the UK exporting a fuel we ourselves could use to generate renewable energy. However, waste is not a very energy rich fuel, and if the total quantity of RDF that was exported in 2017 were treated domestically, it would meet only **0.7%** of our electricity needs.¹¹

In any case, the electricity grid across Europe is increasingly joined up and the UK **benefits** from the energy generated from RDF treated in Europe. The waste is treated in the most **efficient** facilities, often generating **both electricity and**

heat. The Netherlands is the biggest receiver of UK RDF, and an electrical interconnector runs between the Netherlands and the UK, allowing access to each other's networks. An interconnector with Norway, another recipient of UK RDF, is currently being constructed; and an interconnector with a third recipient, Denmark, has also been approved. These cables will form part of the European supergrid, enabling the UK to **access electricity generated across Europe**, produced from UK RDF.



If RDF that was exported in 2016 was treated via domestic EfW – it would generate just 0.7% of total UK electricity generation



Image courtesy of AEB

¹¹ Based on just over 3.6 million tonnes of RDF exported in 2016, calorific value of waste 9.3 MJ/kg, 25% average electrical efficiency of UK EfW facilities, and total electricity generation for the UK in 2016 of 338,600Gwh.



The RDF supply chain has a high employment 'intensity' i.e. **a high number of jobs per tonne of waste** compared with landfill. This is because it is a specialist supply chain, and the waste has to be prepared, handled, transported and loaded onto cargo vessels for shipment. Specific infrastructure, such as RDF production facilities, is required to support these activities. With an average of 20 jobs per 10,000 tonnes of waste processed, total RDF production in the UK in 2016 supported over 6,800 additional jobs in processing alone.¹²

RDF jobs are often **more skilled** than those in the landfill sector. Processing the additional recyclate captured during RDF preparation also contributes to job creation.



Image courtesy of Countrystyle

Conclusion

The **environmental** and **economic** arguments for RDF export are clear, both for the UK and our neighbours. The RDF Industry Group requests that the UK Government and EU provide clarity without delay on the following subjects:

1 Maintaining the current **legislative framework** that allows RDF to be exported, including maintaining the UK's commitment to wider international agreements on transfrontier shipments of waste.

2 Maintaining **streamlined customs processes** and procedures between the UK and EU.

3 Confirming that a **0% tariff** will apply for the export/import of UK RDF to Europe.

The RDF Industry Group offers its **assistance** and **knowledge** in these subjects. The UK Government and EU **must act without delay** to provide clarity to the industry. If the **full benefits** of this waste management route are to be realised, **reassurance is needed** that the movement of RDF from the UK to continental Europe will **continue without hindrance** or **additional cost**. Doing so will be **in the interest of all parties**.

¹² Average of 20 jobs per 10,000 tonnes of waste processed for RDF production compared with 1 job per 10,000 tonnes going to landfill. *Eunomia (2015). RDF Export: Analysis of the Legal, Economic and Environmental Rationales. Report for RDF Export Industry Group*, with just over 3.6 million tonnes of RDF exported in 2016.



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