

Written evidence submitted from SUEZ Recycling and Recovery UK Ltd

The EAC has invited written submissions regarding the potential for Green Jobs in the UK, and SUEZ Recycling and Recovery UK (SUEZ) has prepared this submission working closely with colleagues at the ESA, CIWM and UK Resources Council which we believe identifies the criticality of resource management in delivering a green economy, and the need to map out the green transition so that investment in education and training can be secured to support the new skills and retaining required to underpin these growth areas.

Introduction & Scene Setting

I am Dr Adam Read, External Affairs Director with SUEZ Recycling & Recovery UK Ltd (SUEZ), and I am submitting this response on behalf of SUEZ, however we have openly discussed the critical issues and core messages with the executive team at the Chartered Institution of Waste Management (CIWM) of which I am the incoming President (from June 2021), and the Executive Team and Chairman of the UK Resources Council (for which I am a member of the secretariat). As such some of our submission may look familiar as we co-created some of the new forecasts and staff skills gaps together.

SUEZ Recycling and Recovery UK (SUEZ) are pleased to respond to this call for evidence, because the future of green jobs is very much at the heart of both a UK-wide green recovery, but also at the core of our business and its long term transition to effective resource management. In addition green skills will be key if the planned green transition is to happen, and for planned decarbonization of many sectors (from agriculture and manufacturing, to aviation and chemicals) there will be an increased demand for secondary materials from our sector, with associated demands on staff numbers, skills and availability. We believe that SUEZ and companies like ours are critical to the UK meeting its carbon net zero targets before 2050.

As one of the UK's largest waste and resource management companies providing services to the public and private sectors, we collect both municipal and commercial wastes (of all types, including recyclables and organics) and as such play a key role in providing these materials with secondary and tertiary lifetimes. SUEZ handles over 10M tonnes of waste materials per year in the UK, collected from millions of households and thousands of companies across the UK. Further SUEZ has invested over £2 Billion pounds in new infrastructure and services in the UK in the last decade to drive waste materials up the hierarchy and into more productive use.

Alongside this investment we have developed new training programmes to support our staff as they adapt to new facilities and technologies and even co-developed a new masters levels qualification in running energy recovery facilities with Northumbria University because there were no appropriate courses on offer in the UK market place.

Transitioning from one norm (for example landfill) to another (energy recovery and recycling), with more complexities, inter-relationships and moving pieces relies on the right blend of staff, skills and technology, plus a suitable mix of policies, regulations and consumer education and engagement. As such the future of green jobs is very much a focus for a company like ours.

SUEZ is part of a multinational group that operates from 18 Member States of the European Union through to Hong Kong and Australia, providing waste collection services to a population of nearly 43 million, and waste collections for over 500,000 industrial and commercial clients. The SUEZ Group has experience of operating across a wide range of jurisdictions and policy frameworks, all of which have been responding to the COVID crisis these past 12 months. As a group we have been sharing experiences and insights of best practice, sector restrictions, waste & resource flows and recovery mechanisms and policies, which we are including in our evidence submission.

The waste (and resources) sector is often ill-defined and as such is hard to quantify in terms of employment (although some commentators suggest 150,000 people currently), yet it remains a front-line service, delivering weekly collections and daily processing on behalf of all UK households and businesses and playing a crucial role in both energy (and heat) generation, soil nutrient enhancement and materials recycling and remanufacturing (both in the UK and overseas). As such its' importance and scope should not be underestimated when considering the future of a green recovery and more importantly the opportunity for green jobs. Currently the sector has more staff than in both low carbon and renewable energy sectors, and given the clear policy transformation expected in the UK concerning extended producer responsibility, deposit return, and consistent collections the scale of the sector is about to grow and the types of role will also change.

In recent years SUEZ have worked with the Aldersgate Group, WRAP, the Green Alliance, the UK Resource Council and the CIWM to determine not only the current workforce numbers for waste & resource management, but to better map the scale, size and opportunity for the sector as we strive to hit higher recycling targets, deliver greater circularity, and support the transition to a greener economy. WRAP have suggested that over 500,000 new jobs are needed across the UK by 2030 if we are to meet the needs of a closed loop economy, where materials circulate for many lifetimes, and where all parts of the system are better aligned. We do not disagree with this prediction, but our perspective is a little more focused on the opportunities directly in our sector rather than looking at how the circular economy can be embedded in all sectors, hence our numbers may seem smaller in comparison.

We fully endorse the statement from Aldersgate Group in their' Upskilling the UK workforce for the 21st century' briefing - *In order for these opportunities to materialise, this policy briefing argues that a more comprehensive focus on providing the right skills across key economic sectors will be essential. This will include securing an adequate skills provision for a low carbon economy through collaboration between government, businesses and the education system. It will also require a Net Zero Delivery plan that gives clear market signals to businesses and grows demand for the skills of the future. To deliver on these*

priorities, government should coordinate and enhance local engagement and funding opportunities, both public and private, through the establishment of a National Investment Bank which integrates skills and Just Transition principles at its heart.

Executive Summary

SUEZ suggest that the Committee should consider the following:

1. *The value of the resources & waste sector in helping to facilitate and deliver a green economy in the UK must not be underestimated. We will fuel decarbonization of chemical manufacturing and aviation, improve soil fertility and reduce carbon in agriculture and provide the primary feedstock for secondary manufacturing. All of these opportunities will require significantly more people, many of whom will need new skills and new training to maximize their impact, and that needs clarity of planning and policy.*
2. *For the UK to decarbonize effectively we need a clear vision and plan with a number of transition steps identified and outlined. Each of these should be clear about the technologies needed, the feedstocks required and the timelines in question, and only then should the relevant skills gaps be identified and a plan developed to fill these gaps which is wholistic – from schools and universities to employers and professional bodies alike.*
3. *BREXIT, COVID-19 and the Government’s Net Zero Carbon pledge have created the perfect storm for realigning all of Government’s activities, thus creating more compelling strategies that will encourage investment, reskilling and innovation in all things related to the green economy and green recovery. But, Government must actively support and encourage cross sector working so that skills can be replicated, developed and transferred where appropriate and lessons learned more effectively than before. In addition, Government alignment (cross department) is needed to avoid the likely competing interests for developing the national curricula, for higher education research and training budgets, and for on the job and professional qualifications etc. across many different sectors. These must all be better aligned again identified critical weaknesses and needs that would undermine planned progress and training, schools programmes and higher education initiatives can be aligned against these priorities.*
4. *The waste & resource sector may currently employ 150,0000 people, but the green recovery agenda could result in a net new 25,000 – 30,000 green jobs, plus a significant number of other reskilling and upskilling opportunities for current front line staff involved in waste & recycling collection, manual handling and sorting etc. These are just the roles needed to meet the objectives and targets set out in DEFRA’s Resources & Waste Strategy (2018), so the opportunities for net zero carbon by 2050, and embedding the resources sector with other sectors to aid their decarbonization suggests the scope of new green roles could be a factor of 10 more!*

Data sources

SUEZ have used a number of key reports and references in compiling our evidence base, and would suggest that the Committee take a closer look at these sources in particular, all of which can be downloaded / viewed on our publications website (<https://www.suez.co.uk/en-gb/news/list-of-publications>):

- *The economics of change in the resources and waste sector (2019)*
- *A vision for England’s long-term resources and waste strategy (2018)*

- *A resourceful future: expanding the UK economy (2016)*
- *At this rate: exploring England's recycling challenges (2015)*
- *Driving green growth: the role of the waste management industry and the circular economy (2012)*

Q1. What estimates are there for the jobs required to meet the pathway to net zero emissions, by sector, and other environmental and biodiversity commitments?

SUEZ firmly believes that the pathway to net zero relies on collaboration, co-development and transparency. The resource and waste management sector will need to work across **ALL** sectors and supply chains to ensure that sector professionals can actively influence future choice of materials, improve end of life outcomes and ultimately drive materials up the waste hierarchy.

A report by WRAP and the Green Alliance (2015)¹ estimated that a circular economy could create up to 500,000 new UK jobs and cut unemployment across the country by 102,000. As part of our evidence submission we investigated this and other forecasts and used real world examples of changing skills and employment in our sector to illustrate the scale of some of the **additional jobs** that will be required within the sector in the immediate future.

[a] Consistent collections and food waste

If those local authorities in England currently using a comingled collection for their dry recyclables changed to a source segregated collection (which would deliver greater recycling quality) this could generate thousands of new green jobs.

*In England alone in [2017/2018](#), 20% of Waste Collection Authorities were using a fully comingled system, whilst 50% were comingling some of their materials. When comparing the number of collection staff required to deliver such a service we have used a 1:3 ratio for comingled collections compared to source segregated collections, based on our real world workforce data. For every 100,000 households serviced 45 source segregated staff are required compared to only 15 for a comingled collection. If we apply this to the 20% of authorities in England using a fully comingled collection that would mean that almost **2,000 additional jobs** would be created just on the front line. If we add the additional jobs created from switching partial comingled schemes to source segregated, as the brands and reprocessors demand better quality recycle under EPR reforms, then another **4,000 to 5,000 jobs** might be created.*

*In 2017/2018 49% of English authorities didn't have a food waste collection service. If every authority implemented one in order to deliver on the Government's requirement for mandatory food waste collections by 2023, this should create an estimated **additional 2,500 – 3,500 jobs** (based on 15 staff per 100,000 households) plus drivers and quality supervisors etc.*

*Collecting clean stream materials will also provide additional opportunities for new green jobs across the supply chain in reprocessing and organics treatment, with some small decreases in the number of staff employed at our material recycling facilities (MRFs). As such an **additional 1,000 jobs** could be required in clean stream materials bulking and handling even accepting that some jobs will be transitioned (and upskilled) from existing sorting functions.*

¹ WRAP and Green Alliance (2015) [Employment and the circular economy: Job creation in a more resource efficient Britain](#)

[b] Reuse and Repair

Local authorities are increasingly looking at how they can support their residents (and in time local businesses) to reuse more of their possessions at their end of life. Opportunities are available to collect more items via kerbside services (Textiles and WEEE) or via bulky waste collections or at the local Household Waste Recycling Centre (HWRC). However, to really drive a more circular economy, local authorities and their service providers) are seeking opportunities to link the collection of items with the opportunity to repair and resell them, or provide additional social value to families they support through redistribution services.

With local highstreets under considerable pressure some local authorities are exploring opportunities to work with local reuse partners and provide retail space either on the high street or at the HWRC to move this agenda forward. These activities can generate opportunities for those with repair and refurbishment skills but also retail skills such as merchandising and customer service.

If each local authority invested more in reuse and repair activities, to take these materials out of the waste stream earlier, there could be an estimated:

- **1,000 – 1,500 additional jobs** created at HWRCs which develop reuse shops;
- **300 - 500 additional jobs** in local authority support teams; and
- **12,000 – 15,000 additional jobs** in the community, with the staffing of reuse shops and supporting repair and refurbishment activities (from repair cafes to redistribution centres).

Q2. Does the UK workforce have the skills and capacity needed to deliver the green jobs required to meet our net zero target and other environmental ambitions (including in the 25-year environment plan)?

Our sector increasingly relies on a highly skilled workforce that is technically trained. As we build the new recycling and waste management facilities required to deliver a circular economy in the UK, the need for these skills is only going to expand, whilst the demands of other sectors for feedstocks and quality materials will only challenge our sector more in terms of the scale of the workforce and the skills it needs to deliver.

Our sector is constantly evolving to ensure that we're providing the best solution for the environment. We've transitioned from being heavily reliant on landfill (with limited staff numbers) to a sector that utilises energy recovery to gain additional value from residual waste. We've transitioned from a low recycling society to a high one, with associated employment opportunities and skills demands. We have trained existing staff to do this, but we've also assimilated skills from other sectors such as the power and manufacturing sectors. We will continue to do this but the pace of change and scale of transition we are facing means that we will need support to deliver this, from Government in terms of leadership and vision, and clarity of demand so we can secure investment in relevant training and support new curricula in schools, colleges and universities etc.

The CIWM are currently undertaking a significant project which will be complete by June 2021 focused on understanding the real need for skills 'in the future' for the expanding resource sector. This will map out what new and existing skills our sector will require by 2030 and should prove a

positive read for this Committee. SUEZ are contributing to this thinking and through the UK Resources Council will be putting forward a skills-based development plan later in 2021.

Q3. What needs to be done to ensure that these skills and capacity are developed in time to meet our environmental targets?

We believe significant targeted investments are needed in education and training to address immediate unemployment resulting from Covid-19 and the structural shifts expected from decarbonisation in some sectors and regions. Government must have a clear vision of what skills are needed to deliver the transformation and when this transitions will happen, and only then can we work backwards and determine what interventions, support and initiatives are needed to drive the new skills to meet this demand.

More should also be done to promote circular economy career paths within schools and higher education, highlighting the essential role of the sector in tackling climate change, and facilitating decarbonisation in a number of other priority sectors. This will ensure that we attract the next generation of talent and that it is equipped with the right skills to meet the Government's environmental and economic objectives.

The key ask is for Government to provide a unified green skills roadmap, one that highlights the skills needed and the timeframe to deliver them (as determined by sectoral mapping of technology, service and innovation delivery to meet decarbonisation targets). One that identifies the timeframe required to embed these key principles in schools and colleges in time for them to deliver the new crop of apprentices, and longer term university graduates and professionals, and a plan that reflects the interests of BEIS, DEFRA, DfT and the Department for Education.

SUEZ, and companies like us, are willing to invest in our skills development programmes, plus our recruitment activities, if we are confident that the policy framework will remain stable and the key needs and opportunities are not only understood by all, but are clearly laid out in Government briefings. We can then work with our peers and other sectors to develop appropriate training and development systems, like the Green Skills programme under development by the UK Resources Council, and the leading professional bodies, like CIWM, to ensure a joined up plan which is complementary and focused on the key needs and at the right times.

Q4. What measures should the Government take to ensure that its proposals to meet environmental targets do not by default lead to jobs in affected industries being exported?

There is huge potential for re-training staff in sectors which are likely to decline under a decarbonisation agenda (power and heavy manufacturing) to make them valuable in newer and greener sectors like renewables, hi-tech industries and in the management of secondary materials, chemical recycling and combined heat and power etc. But this will take a consolidated effort sectorally and regionally to ensure it happens.

Q5. What risks are there to meeting the Government's ambitions for green job creation in both the public and private sectors? What should the Government do to create the conditions to ensure its commitments are met by both sectors?

There are plenty of opportunities in both the public and private sectors for green jobs and re-skilling of existing workforces, as the 2 examples earlier identified. Government must set the path and use a range of mechanisms like tax breaks to facilitate more reuse and repair etc.

But then let the market deliver this in the most effective and sustainable way, as we have done to date through the growth of both energy recovery and recycling based solutions.

Q6. Are the Government's ambitions for green job creation in the public and private sectors sufficient for the scale of the challenges? What changes should be made?

Our sector would benefit from some clarity of policy from Government on green jobs and skills and believe that there should be a holistic approach that considers parallel policies and programmes in all Government Departments where appropriate. Just as CIWM has called for green skills to be embedded in all education and training it should also be embedded within decision making across all government departments. A disconnected approach leads to piecemeal delivery and often perverse incentives.

Q7. How can the UK ensure jobs are created in areas most impacted by the transition to a low-carbon economy?

Through the Resource Council's initial work on regionality it would seem that there are opportunities to create regional hubs of excellence that align with the current infrastructure, skills and of course future local needs of the economy (not just our sector). This would allow the resource and waste management sector to provide materials to other sectors to speed their green transition in the most effective way possible. This type of transition would take 5-7 years to identify the opportunities and develop the required infrastructure. Examples could include fertilisers and nutrients from organic waste for soil replenishment in agriculture, end of life batteries from electric vehicles for refurbishment and future energy storage, waste plastics for aviation fuel or chemical manufacturing. Some of these opportunities will undoubtedly be in former heavy industrial areas or regions that will suffer as industry decarbonises, as the skills will be available to be harnessed by these local hubs of training, innovation and excellence.

As the CIWM suggest, SUEZ supports the idea of some Government training investment is directed to aid those areas specifically effected by the transition. Targeted investments and retraining programs should ensure that workers in high-carbon sectors are able to find employment in green industries which will be in demand for the long-term.

Through our work with the ESA, we know that our sector is ready to invest over £10 billion in new infrastructures in the next 10 years to boost the recycling and recovery of waste from households and businesses around the country, assuming that the right long-term policy framework is established. This will lead to a significant number of new jobs, some will be satisfied from re-training of existing staff (from comingled collections to source segregation) whilst others will need new entries, new graduates and more skilled labour from other sectors with the right skills base – drawing on areas & sectors which might be in decline.

Q8. What additional interventions should be undertaken to aid in a 'just transition'?

CIWM believe that focussing on the regional nature of waste arisings (and composition) and the benefits of certain infrastructure development (organics, recyclates, chemicals etc.) appropriately across the UK would aid in a just transition.

Q9. What impact can green jobs have on the wider UK economy?

As SUEZ knows from its work on downstream end markets and the joint initiatives we have with other sectors for the production of chemicals, fuels and materials we believe that the development of additional green jobs in the waste and resources sector will have a huge ripple effect across all other sectors, by speeding the transition to net zero for others and amplifying the impact green jobs can have on the wider UK economy. This is why a holistic approach must be taken by Government, as the UK Resources Council have asked for, and green skills must be embedded in all training programmes, academic and vocational qualifications for all sectors going forward.

Q10. What contribution can green jobs make to the UK's economic recovery from Covid-19?

Accelerating the move towards a circular economy will be essential to increase the UK's resilience to the climate crisis, and to global supply chains crises as a more circular use of materials would reduce supply chain risks. The pandemic highlighted the need for more resilient supply chains that circular principles can provide solutions to. For example, promoting design for repairability, reusability, and recycling would allow the UK to use products and materials for longer, decreasing our reliance on import and availability of raw materials.

Q11. How can the UK ensure high emissions are not locked-in when tackling unemployment?

As with the ESA, SUEZ believe that climate resilience as well as long-term climate and environment goals should be built into all future financial and policy decisions. New investments to support the economic recovery and jobs should be resilient to future climate risks and accelerate the shift towards a more resilient, low-carbon circular economy. These investments should thus prioritise low-carbon infrastructures and circular economy infrastructures over all other types.

Looking ahead?

SUEZ support the work of the Environment Audit Committee and welcome its increasing attention on green skills that will underpin the green recovery programme across the UK. In 2021 there is a lot of work being undertaken on skills needs, the skills gap of tomorrow, and the roadmap needed to deliver these, in our sector and in many others. As SUEZ progress their work with the CIWM, ESA and Resource Council we would welcome the opportunity to share our findings, progress and insights, and should any of our work be of significant interest then we would be happy to come and discuss this with you through an on-line meeting, call or workshop.

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SUEZ Recycling and Recovery UK Ltd

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