

# **Carbon reporting**

## **Carbon footprint assessment and reduction plan**

Financial Year 2021/22

**SQW**

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## Declaration and Sign Off

This Carbon Reduction Plan has been completed in accordance with PPN 06/21 and associated guidance and reporting standard for Carbon Reduction Plans.

Emissions have been reported and recorded in accordance with the published reporting standard for Carbon Reduction Plans and the GHG Reporting Protocol corporate standard and uses the appropriate Government emission conversion factors for greenhouse gas company reporting. Scope 1 and Scope 2 emissions have been reported in accordance with SECR requirements, and the required subset of Scope 3 emissions have been reported in accordance with the published reporting standard for Carbon Reduction Plans and the Corporate Value Chain (Scope 3) Standard.

This Carbon Reduction Plan has been reviewed and signed off by SQW’s Management Board.

Name: Joe Duggett

Role: Managing Partner, Performance and Projects

Signed:



Date: 14/09/2023

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# 1. Summary

## Commitment to net zero and being carbon neutral

- 1.1 SQW is committed to being a net zero company by 2030**, which means that we will reduce our emissions as far as is practical and offset the remaining emissions. This report sets out an assessment of carbon emissions for 2021/22 (that is the period from April 2021 to March 2022, the last full year for which data is available) and the actions that we will implement going forward.
- 1.2 SQW was carbon neutral for 2021/22** by offsetting our carbon emissions. Given the on-going effects of COVID-19 at the time and associated restrictions, despite some modest increases in business travel and commuting compared to the previous year, 2021/22 remained a highly unusual year, and a high level of homeworking continued. We will therefore continue to monitor our emissions as new working patterns evolve. Inherently, SQW remains a relatively low emissions consultancy business.

## Baseline and latest emissions

- 1.3** Table 1-1 and Table 1-2 summarise our carbon emissions and carbon footprint for 2020/21 (baseline) and 2021/22 (latest) respectively. As noted above, both years are considered highly unusual owing to the effects of COVID-19.
- 1.4** This shows **total emissions in 2021/22 of 45.7 tCO<sub>2</sub>e** (tonnes of carbon dioxide emissions) across SQW's operations, equating to 0.9 tCO<sub>2</sub>e per employee. This represents a modest increase on our baseline from 2020/21, owing principally to an increase in the purchase of electricity and heating for offices and employee commuting, both associated with slightly higher levels of office working.
- 1.5** We have paid to offset these emissions, and so **for 2021/22 we were carbon neutral**.

**Table 1-1: Baseline SQW carbon emissions 2020/21 (i.e. April 2020 to March 2021)**

Emissions categories and what is included		Emissions, tCO <sub>2</sub> e
<b>Scope 1:</b>		0.0
<ul style="list-style-type: none"> <li>We lease our office space and have no control of heating. We have no company cars. Therefore, there are no emissions associated with Scope 1</li> </ul>		
<b>Scope 2:</b>		8.3
<ul style="list-style-type: none"> <li>Purchase of electricity and heating for offices</li> </ul>		
<b>Scope 3:</b>		27.1
Purchases, incl. the upstream transportation and distribution	2.8	
Transmission/distribution losses from purchase of electricity	0.4	
Waste generated in operations	0.0*	
Business travel (incl. hotel stays)	0.1	
Employee commuting	0.1	

Emissions categories and what is included		Emissions, tCO <sub>2</sub> e
Homeworking	23.6	
Downstream transportation and distribution	0.0**	
<b>Total for 2020/21</b>		<b>35.4</b>
<b>Intensity ratio: carbon emissions per FTE</b>		<b>0.8</b>

Source: SQW. Notes: \*Very small levels of waste-related emissions mean that this is rounded to zero. \*\*Given that we sell knowledge through consultancy services, rather than a physical product, there is no downstream transportation and distribution. Therefore, the emissions associated with this category of Scope 3 are zero. No. of FTEs uses the average across the year, which was 45.4.

**Table 1-2: Latest SQW carbon emissions 2021/22 (i.e. April 2021 to March 2022)**

Emissions categories and what is included		Emissions, tCO <sub>2</sub> e
<b>Scope 1:</b>		0.0
<ul style="list-style-type: none"> <li>We lease our office space and have no control of heating. We have no company cars. Therefore, there are no emissions associated with Scope 1</li> </ul>		
<b>Scope 2:</b>		13.6
<ul style="list-style-type: none"> <li>Purchase of electricity and heating for offices</li> </ul>		
<b>Scope 3:</b>		32.1
Purchases, incl. the upstream transportation and distribution	4.0	
Transmission/distribution losses from purchase of electricity	0.6	
Waste generated in operations	0.6	
Business travel (incl. hotel stays)	1.1	
Employee commuting	2.5	
Homeworking	23.4	
Downstream transportation and distribution	0.0*	
<b>Total for 2021/22</b>		<b>45.7</b>
<b>Intensity ratio: carbon emissions per FTE</b>		<b>0.9</b>

Source: SQW. Notes: \*Given that we sell knowledge through consultancy services, rather than a physical product, there is no downstream transportation and distribution. Therefore, the emissions associated with this category of Scope 3 are zero. No. of FTEs uses the average across the year, which was 50.3.

## Emissions reductions targets

- 1.6** In setting emissions reductions targets we have been mindful of those areas where we have some degree of control and influence, and also where we have a clear current understanding of our emissions and options to reduce them. As noted above, 2021/22 was a highly unusual year for SQW's operations, with very limited business travel and commuting and significant homeworking. 2021/22 witnessed a modest increases in our emissions compared to the baseline. However, the baseline (2020/21) was also a highly unusual year, given COVID-19 restrictions and very low levels of commuting and almost no business travel. Therefore, **while accurate, both the baseline and latest data do not represent typical years; the modest increase in emissions in 2021/22 needs to be seen in this context.**
- 1.7** Given the unusual context of 2021/22, we expect emissions to increase in 2022/23, with increasing levels of employee commuting and business travel associated with the end of restrictions associated with COVID-19, and as new working arrangements are established. We hope to be in a better position to set targets on these Scope 3 emissions in the future –

potentially in 2024 or 2025 – when we have a better reflection of ‘steady state’ activity, but at this stage we are not able to do so in a sensible way.

- 1.8** The area where we can set emissions targets is in relation to Scope 2, the purchase of electricity and heating for our offices. We know that one of our three offices uses renewable energy. We intend to ensure that all of our offices use renewable energy by 2030, with the result that our Scope 1 and 2 emissions are zero. As an interim target, we have set a target<sup>1</sup> to reduce Scope 2 emissions by around 50% from the baseline level by 2027. This means that one further office will use renewable energy by 2027 (and that any additional offices also use renewable energy). This will be achieved through influence of our landlords and/or in the role of energy sources in future office move/lease decisions – alongside other factors such as specific location, price, market availability etc.
- 1.9** If achieved, **this change to Scope 2 emissions will reduce our baseline position by around 12% by 2027 and by 23% by 2030.**

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<sup>1</sup> Carbon footprint assessment and reduction plan, 2020/21

## 2. Assessment

### Scope 2: heating and powering our offices

- 2.1** SQW has three physical offices, in Edinburgh, London and Manchester. Two employees are also based in the office of one of our sister divisions, in Oxford. The Edinburgh and Manchester offices have a mix of gas and electricity, and the London office has only electricity. We know from our landlord of our Manchester office that the electricity is from a 100% renewable energy tariff, and so the emissions from electricity usage are zero. We have been unable to ascertain from landlords in Edinburgh and London the electricity tariffs, and so we have drawn on emissions conversion factors provided in Government guidance<sup>2</sup> for the average of electricity generation. Emissions for the employees based in Oxford are attributable to our sister divisions and so are zero for the purposes of SQW's carbon reporting.
- 2.2** Table 2-1 summarises gas and electricity usage across the offices, together with the associated carbon emissions. This shows **total emissions of 13,570 kg CO<sub>2</sub>e**.

**Table 2-1: Usage and emissions associated with electricity and gas for SQW offices 2021/22 (i.e. April 2021 to March 2022)**

	Avge FTEs for 2021/22	Gas usage (kWh)	Elec usage (kWh)	Emissions from gas (kg CO <sub>2</sub> e)	Emissions from elec (kg CO <sub>2</sub> e)	Total emissions (kg CO <sub>2</sub> e)
Edinburgh	9.5	17,937	4,092	3,274	791	4,065
London	19.6	0	27,955	-	5,406	5,406
Manchester	18.7	22,454	12,548	4,099	-	4,099
Oxford	1.8	0	-	-	-	-
<b>Total</b>	<b>49.6</b>	<b>40,391</b>	<b>44,595</b>	<b>7,373</b>	<b>6,197</b>	<b>13,570</b>

Source: SQW analysis

Notes: Gas and electricity usage for Edinburgh and Manchester are estimated based on the costs due to us provided by property landlords. The London office usage is estimated based on breakdowns provided by the landlords that do not match to our own April-March reporting cycle. The Manchester office is on a 100% green tariff, and so emissions are zero. Oxford's emissions are excluded as the office is included within our sister divisions. Emissions are calculated based on usage and the emissions conversion factors provided in Government guidance for natural gas (gross CV factor is 0.18 kgCO<sub>2</sub>e per kWh) and electricity generated (factor is 0.21 kgCO<sub>2</sub>e per kWh) from <https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2021>

### Scope 3

- 2.3** For Scope 3 we have identified the following sources of emissions as being the main ones associated with our operations and supplies:
- Purchases of ICT equipment & running of servers and other office purchases (including the upstream transportation and distribution)

<sup>2</sup> See <https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2021>

- Transmission and distribution loss from the purchase of electricity for our offices
- Waste generated in operations
- Business travel, including hotel stays
- Employee commuting
- Homeworking (i.e. emissions associated with additional power and heating used by staff in the course of working from home).

**2.4** Given that we sell knowledge through consultancy services, rather than a physical product, there is no downstream transportation and distribution. Therefore, the emissions associated with this category of Scope 3 are zero. Indeed, the transport/distribution component of consultancy is through business travel.

### **Purchases of ICT equipment & running of servers and other office purchases (including the upstream transportation and distribution)**

**2.5** The purchases of ICT equipment and the running of key hardware off site (i.e. our servers, which are based in specialist datacentres) are important sources of our carbon emissions.

**2.6** We have four servers off site, and we share these with our sister divisions. Data from Dell indicates that the carbon emissions of the full lifecycle of these servers (including manufacture, transportation and distribution, operations and end of life) are 31,970 kg CO<sub>2</sub>e. Based on an assumed lifespan of four years and the fact that 30% of the emissions are attributable to SQW (with the remaining 70% attributable to our sister divisions), **we estimate a single year of emissions for these servers to be 2,398 kg CO<sub>2</sub>e.**

**2.7** Our ICT purchases in 2021/22 were for 10 laptops, five monitors and 3 other items (e.g. headsets, keyboards, webcams). Based on the estimated weight of these items (62kg) and conversion factors for the supply of ICT related equipment including transportation and distribution (24.865kg CO<sub>2</sub>e per kg of ICT equipment<sup>3</sup>), **we estimate emissions for these ICT items to be 1,547 kg CO<sub>2</sub>e.**

**2.8** Other office purchases principally related to stationery suppliers. In 2021/22, these were negligible, including only a very modest level of paper purchase (five packs), providing **estimated emissions for stationery supplies of 11 kg CO<sub>2</sub>e.**

**2.9** Therefore, the total emissions for purchases, including upstream transportation and distribution, are 3,944 kg CO<sub>2</sub>e.

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<sup>3</sup> Government emissions conversion factors indicate 24,865 kg CO<sub>2</sub>e per tonne of ICT equipment.

## Transmission and distribution loss from electricity

- 2.10** In purchasing electricity to power our offices, there are losses in its transmission and distribution – i.e. more electricity needs to be generated than we actually use. These losses are associated with further emissions.
- 2.11** Based on the electricity usage of our Edinburgh and London offices (Manchester is excluded given that it is on a 100% renewable tariff), **we estimate the carbon emissions associated with these losses to be 567 kg CO<sub>2</sub>e** (0.02 kgCO<sub>2</sub>e multiplied by 32,047 kWh electricity purchased<sup>4</sup>).

## Waste generated in operations

- 2.12** Based on assumptions related to recycling and waste in our offices, **we estimate emissions from office waste to be 613 kg CO<sub>2</sub>e<sup>5</sup>**:
- waste = 599 kgCO<sub>2</sub>e
  - recycling = 14 kgCO<sub>2</sub>e.

## Business travel

- 2.13** In 2021/22 there was limited business travel as a result of the COVID-19 pandemic. As a result, the associated carbon emissions were very low compared to a 'normal' year. Table 2-2 shows the mileage by mode of travel and the associated carbon emissions. This shows total **carbon emissions associated with business travel at 1,061 kg CO<sub>2</sub>e**.
- 2.14** There were two hotel stays during the year. This provides **total carbon emission associated with hotel stays at 21 kg CO<sub>2</sub>e**.

**Table 2-2: Carbon emissions associated with business travel**

Mode	Mileage	kg CO <sub>2</sub> e per mile	kg CO <sub>2</sub> e
Rail	4835	0.06	276.2
Taxis	64	0.33	20.9
Own car	929	0.27	255.4
Flights	1286	0.40	508.9
<b>Total</b>			<b>1061.4</b>

Source: SQW analysis

Notes: The assumptions for emissions per mile have been derived from Government guidance using assumptions for "national rail", "regular taxi", "average/unknown" vehicle type for car, and "short haul to/from UK" for flights - see <https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2021>

<sup>4</sup> The calculation uses the appropriate Government emissions conversion factors.

<sup>5</sup> The coefficients used below are from Government emissions conversion factors for general refuse and paper/cardboard recycling



## Employee commuting

- 2.15** There was a modest level of office occupancy in 2021/22 owing to the COVID-19 pandemic, and so commuting was low. Based on the collection of data on office attendance, means of transport for commuting, and commuting distance for a "normal" week for each office member, and taking into account that around half of the year was impacted by COVID-19 restrictions on office working, we have estimated total **carbon emissions associated with employee commuting travel at 2,452kg CO<sub>2</sub>e.**

**Table 2-3: Carbon emissions associated with commuting**

	Mileage	kg CO <sub>2</sub> e per mile	kg CO <sub>2</sub> e
Rail	13450	0.06	768.5
Tube	3375	0.04	151.1
Bus	930	0.16	144.5
Car	5050	0.27	1388.3
Total	<b>22,805</b>		<b>2452.5</b>

Source; SQW analysis  
emissions from 2022

Notes : The assumptions for emission per mile have been derived from Government guidance and conversion factors for GHG emissions from 2022

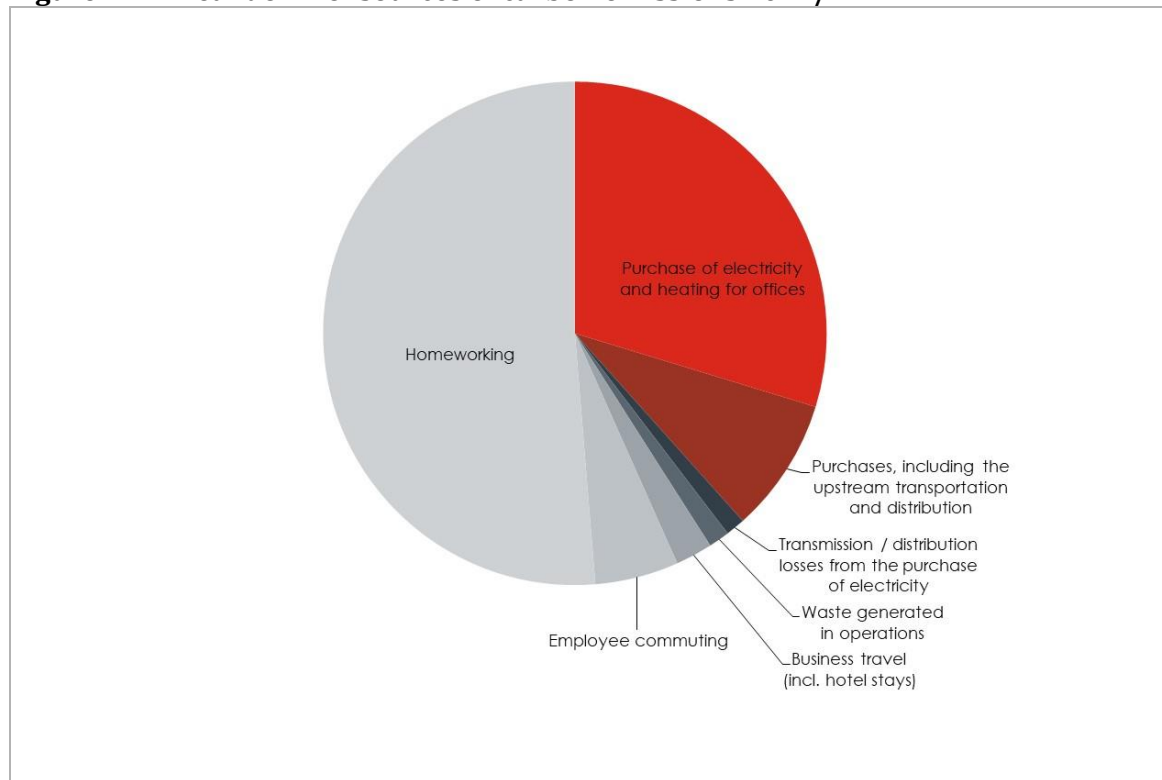
## Homeworking

- 2.16** There was considerable homeworking during 2021/22, with an estimated 75% of working days carried out at home. Based on the number of FTEs, working days and an assumption of eight hours per day, this results in 68,751 working hours spent at home (50.3 FTEs for 228 working days \* 75%).
- 2.17** Using Government guidance on the CO<sub>2</sub>e conversion factor for FTE working hour office and heating from home for 2022 (of 0.34 kg CO<sub>2</sub>e equivalent per hour), we have **estimated carbon emissions associated with homeworking of 23,427 kg CO<sub>2</sub>e.**

## Breakdown of emissions sources

**2.18** Figure 2-1 sets out the breakdown of carbon emissions by source. This shows that approximately half (51%) of our emissions for 2021/22 were due to homeworking (compared to 67% from the previous year), followed by 30% from the heating and power for offices, and 9% from ICT/other purchases/operations. Employee commuting accounted for 5% of emissions; this was higher than the baseline year (for 2020/21), but still low given high levels of homeworking and COVID-19 restrictions. We expect that this breakdown will change in future years as new working arrangements become established, with the expectation of more commuting and business travel.

**Figure 2-1: Breakdown of sources of carbon emissions 2021/22**



Source: SQW analysis

### 3. Targets and actions

- 3.1 SQW is committed to being a net zero company by 2030.** This commitment is highlighted explicitly in our new five-year strategy “*Towards SQW 2028*”, where advancing with purpose our commitment to Social Value, including Net Zero is identified as one of five ‘Strategic Ambitions’ which will frame our business activity and decision-making over 2023-2028.
- 3.2** As noted in the first section, 2021/22 was a highly unusual year for our operations, and so we will continue to monitor our emissions closely. That said, if the emissions remain around the level seen in 2021/22 (or increase only modestly as we begin to travel more, notably for business travel and potentially for commuting) **we will continue to pay to offset our residual emissions in order to continue to be carbon neutral.** Achieving net zero, whereby we reduce our emissions as far as is practical, will need to take account of the following areas:
- reducing emissions associated with office heating and power
  - determining where we can reduce emissions associated with our purchases and running of ICT equipment
  - actions that we can implement that can minimise our indirect emissions through business travel, employee commuting and homeworking.
- 3.3** At this stage we have set a target to ensure that all of our offices use renewable energy by 2030, with the result that our Scope 1 and 2 emissions are zero. As an interim target, we intend to reduce Scope 2 emissions by around 50% from the baseline level by 2027. This means that one further office will use renewable energy by 2027 (and that any additional offices also use renewable energy). This will be achieved through influence of our landlords and/or in the role of energy sources in future office move/lease decisions – alongside other factors such as specific location, price, market availability etc.
- 3.4** If achieved, **this change to Scope 2 emissions would reduce our baseline position by around 12% by 2027 and by 23% by 2030.**
- 3.5** Targets in relation to Scope 3 emissions will be set when we have more reliable and meaningful data on our emissions once new working arrangements post-COVID-19 have been established.

#### Key actions

- 3.6** The priority actions for us for the coming period are to:
- where practical and in line with business needs embed low emissions that have been achieved from reduced travel due to the pandemic through the use of online meetings
  - build environmental impacts into office infrastructure decisions and discussions (including with landlords related to new or extended leases), in particular in relation to

energy tariffs (with the ultimate objective that we have zero emissions associated with the electricity and heating of offices by 2030), and heating/lighting facilities.

## Medium and longer-term actions and considerations

**3.7** The assessment points to two further considerations:

- Our central servers and ICT equipment may be key sources of carbon emissions. This raises issues around the potential reductions that could be achieved through moving to cloud based ICT solutions, and potential more marginal savings from seeking to lengthen the life of ICT equipment (within business requirements).
- Hybrid working may have implications for our carbon footprint, and so better understanding of the sources of emissions will be useful in identifying further actions.

## Ongoing actions

**3.8** SQW has an Environment Policy, and this includes a series of ongoing actions that we take to minimise our impact on the environment. These are summarised as follows:

### Minimise energy use and carbon impact

**3.9** Within the practical constraints that our offices are in multi-tenant buildings managed by external parties, we will:

- use low power consumption electrical devices wherever feasible
- encourage all staff to take responsibility for switching off lighting, computers, screens and other electrical equipment when not in use
- ensure that all light bulbs that need replacing are replaced with energy-efficient bulbs wherever feasible so to do.

### Commuting

**3.10** The company is committed to reducing air pollution and energy use by minimising the need for car usage by its staff in commuting. We will:

- continue to use office locations that are very well served by public transport
- offer interest-free rail travel season ticket loans to all permanent employees
- encourage cycling to work where possible, through participation in the government's Cycle to Work scheme.

- allow members of staff to work from home, where this meets the firm's and individuals' needs, under our flexible working policy

#### **Travel for project and corporate reasons**

**3.11** In relation to travel and meetings, for both clients and internally, we will:

- encourage clients to use online meetings rather than face to face meetings where appropriate, recognising that at times face to face meetings will be required
- encourage staff to walk, cycle or use public transport as far as practical when travel is required on a project (as opposed to travelling by car or aeroplane)
- pay a mileage allowance for business travel on bicycles (except commuting) and an enhanced car mileage allowance where two or more employees travel in a car on business (except commuting).

#### **Reduce material waste and maximise recycling**

**3.12** We procure a range of goods and services for use in our business activities, particularly stationery and printing consumables. We will:

- encourage staff to recycle paper and cardboard waste through provision of recycling bins
- recycle 100% of our printer and photocopying toner cartridges
- ensure that all redundant furniture is re-used or recycled where possible, by selling it on, giving it away, or recycling it
- ensure that redundant ICT equipment has any data securely wiped, and is re-used where possible within the wider SQW Group, or otherwise disposed of in accordance with the Waste Electrical and Electronic Equipment Directive
- minimise use of paper by encouraging staff to move towards predominantly electronic file storage and use
- where paper is used, minimise printing requirements by encouraging double-sided and two-pages-per-sheet printing where appropriate, and the use of versions of our standard reporting templates with blank front/back covers, and continuing to move towards predominantly electronic file storage
- avoid using single use plastics as part of office supplies as far as possible (e.g. plastic drinks bottles; individually wrapped food products; and plastic straws and cutlery) by identifying these and making specific requests to suppliers or seeking alternative suppliers where this is practical

- aim to recycle a wider range of waste products from office life each year, as far as is practical (e.g. cans, plastic bottles, etc.) through local refuse collections.



## Contact

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## About us

### **SQW Group**

SQW and Oxford Innovation are part of SQW Group.

**[www.sqwgroup.com](http://www.sqwgroup.com)**

### **SQW**

SQW is a leading provider of research, analysis and advice on sustainable economic and social development for public, private and voluntary sector organisations across the UK and internationally. Core services include appraisal, economic impact assessment, and evaluation; demand assessment, feasibility and business planning; economic, social and environmental research and analysis; organisation and partnership development; policy development, strategy, and action planning. In 2019, BBP Regeneration became part of SQW, bringing to the business a RICS-accredited land and property team.

**[www.sqw.co.uk](http://www.sqw.co.uk)**

### **Oxford Innovation**

Oxford Innovation is a leading operator of business and innovation centres that provide office and laboratory space to companies throughout the UK. The company also provides innovation services to entrepreneurs, including business planning advice, coaching and mentoring. Oxford Innovation also manages investment networks that link investors with entrepreneurs seeking funding from £20,000 to £2m.

**[www.oxin.co.uk](http://www.oxin.co.uk)**