

Environmental impact update 2022



We're committed to reducing our emissions by 50% by 2030 and achieving net-zero by 2050

Our emissions are down 30% on 2019 levels

Our emissions are up 6% on 2020 levels

83 more of our shops have been upgraded to using LED lights

2 of our labs have been given the LEAF Silver Award

Our emissions are independently compiled and then interdependently assessed

Sustainability at Cancer Research UK

Climate change is important to our supporters, partners and the communities we serve, and we recognise our responsibilities to support the global effort to reduce emissions and negative environmental impacts. We are committed to making decisions that both maximise our positive impact and minimise our negative impact and to continuously improving our performance in this area.

Our environmental approach forms part of our wider sustainability strategy, which in turn is key part of our strategy to bring about a world where everyone can live longer, better lives, free from the fear of cancer.

‘Sustain’ is one of our five strategic pillars. It is about making choices now that will give us the platform from which to make progress in the years and decades ahead. We must become a truly sustainable organisation – environmentally, financially and operationally – if we are to achieve our mission.

This means considering the sustainability of our operations, research, fundraising activities, supply chains, investments, products and partnerships. This will allow us to become more efficient, reduce waste and better achieve our mission, while being a responsible charity to all our stakeholders.

We will be...

thinking long term so we can keep beating cancer in the future

becoming as efficient and low waste as possible

understanding how supporting good health and longer, better lives also fights climate change

working with our partners, stakeholders and communities to be sustainable together

Our approach to being a sustainable organisation

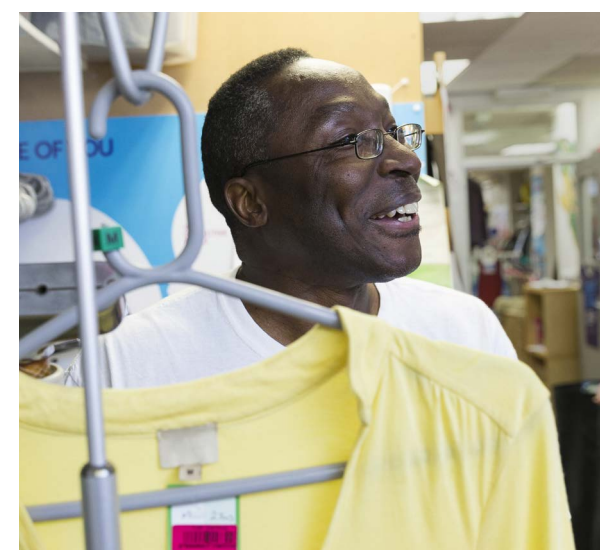
At our core we are a social impact organisation, we exist to beat cancer.

We choose to be sustainable in how we work.

Beating cancer is a long term game. We must become a truly sustainable organisation – environmentally, financially and operationally – if we are to achieve our mission.

We believe that sustainability is everyone's responsibility and is lived through every decision we make. We are a responsible organisation and continuously improve our ESG performance.

We work in partnership



Equality, diversity and inclusion

Long-term sustainability means being a diverse and inclusive organisation, bringing in the best ideas and being reflective of the people and communities we serve.

Part of the Sustain pillar in our charity strategy:
Foundations for sustainable long-term progress against cancer

Our sustainability foundations





Planet – reducing our environmental impacts

Our environmental impact targets

In our strategy:

We commit to:

- Embed environmental sustainability in all that we do, and influence our partners to do the same.

This means that we will:

- Develop and implement an ambitious road map to improve our environmental sustainability and reduce our carbon footprint, including working with the institutions that we fund.
- Deliver fundraising and trading initiatives that are environmentally friendly and socially sustainable.

Our emission commitments

We've committed to reducing our scope 1, 2 and 3 emissions by 50% from our 2019 base line by 2030, thereby joining the UN Race to Zero.

We've also committed to achieving net-zero by 2050 and, for our commercial activities, connecting this to the Science Based Targets initiative.

We're signed up to Textiles 2030, looking to reduce the aggregate greenhouse gas of our new products by 50%, which is sufficient to limit global warming to 1.5°C in line with the Paris Agreement on Climate Change and to achieve net zero by 2050.

For more detail on our emissions commitments, go to page 7.

What we've done so far

In late 2019, we moved into our new head office building which is rated BREEAM Outstanding, scoring 94% against the sustainability criteria. This rating is very hard to achieve and was important to us to help reduce our environmental impact.

During 2021, we started our Refresh Programme to update all our shops to LED lighting by 2025/26. In 2021/22, we upgraded 83 shops, saving over 520,000kWh per year. This means 203 of our 585 shops are now LED-upgraded.

We have a sustainability network of employees from across the organisation who champion awareness, activities and innovation around the organisation.

We have looked to make our fundraising events more sustainable, reducing materials, carbon and waste, including:

- We use reusable tabards rather than giving out t-shirts to volunteers.
- We have moved from single use plastic water bottles to boxed water that participants can re-fill their own bottles from. An added benefit is that the box and bladder inside each box is recyclable.
- We now have green zones with special signage guiding participants to dispose of rubbish in responsible ways, including signage about which bin takes what type of rubbish, 'green zone volunteers' to help people find the right bin and lots of litter pickers so that all those on site can help us keep events tidy.
- We are trialling reusable cable ties to help to reduce our single-use plastics.
- We give out staff kit to new event assistants during their training days rather than in the post.

We are also proactive in contributing to policy and information where climate and health overlap.

- We responded to DEFRA's call for evidence on single-use plastics - specifically the section on tobacco filters, where we supported the call for the tobacco industry to be made to pay for the environmental damage of littered tobacco filters across England. Given the clear parallels with our calls for a Smokefree Fund, we also highlighted that the industry should be paying for the wider cost of tobacco control measures across the UK.
- We set up an internal air-pollution working group, looking at issues regarding air-pollution and lung cancer, and supporting a cross-organisational approach to corporate partnership opportunities.
- We include links between climate and health in our information on air pollution, including actions we can take to reduce air pollution. We also include links in our information on diet and physical activity to help support people to understand the link between human health and the environment. As part of this, we have highlighted initiatives like Meat-free Mondays and walking or cycling over driving.
- We are a member of the Healthy Air Campaign, whose members are calling for legally binding commitments to WHO guidelines for particulate matter, a UK right to clean air, a focused cross-departmental approach to tackling air pollution and better monitoring and reporting of air pollution. Currently, the Healthy Air Campaign's focus is on responding to the newly announced UK Government consultation on targets under the Environment Act, including on PM2.5, and we have recently co-signed a letter from the Healthy Air Campaign to DEFRA.



Our emissions in 2021

We have pro-actively looked to maintain the emissions reductions seen in 2020 as a result of the impact of COVID-19. This year, COVID-19 once again had an impact, with reduced business travel, and shops and offices being closed during lockdowns and having reduced opening hours due to staff and volunteers with COVID-19.

In 2021, our emissions (7,006 tCO₂e) increased 6% from 2020 (6,584 tCO₂e) but remained 30% lower than our 2019 base levels (9,942 tCO₂e). Our energy use was up 14.17% in 2021 (31,710 MWh) compared to 2020 (27,775 MWh), but the increased greening of the UK energy grid meant that the impact was limited to a 6% increase in emissions. We remained 7.17% lower than our 2019 energy base levels (34,258 KWh).

This increase was due to a number of factors:

- During the year we opened three new Superstores – in Dundee, Newport and Bristol – growing our shop portfolio and increasing our carbon and energy use.

- The Beatson Institute, which makes up 39% of our 2021 emissions, was able to safely accommodate more people than in 2020. This was closer to 2019 levels, and maintaining ambient temperatures was more intensive in 2021 with unusually cold and hot months, volatility we expect to need to be prepared for in the future.
- While we anticipate our energy use in buildings will increase in 2022, we expect them to remain below 2019 levels as flexible working, reduced business travel, new LED lighting in stores and other efficiency and waste reduction initiatives are rolled out.

What we will do in 2022

- We have a new sustainability team to lead on sustainability issues Cancer Research UK.
- To help us understand where we can have the best focus and biggest impact we will commission and complete an externally led sustainability double materiality assessment, including key partners we work with across all important areas of activity, upstream and downstream.
- We will complete a comprehensive map of our indirect ('Scope 3') emissions from all our activities, including our upstream supply chain and downstream grants.
- Using this new information, over 2022, we will agree a new environmental impact strategy including short, medium and long-term emissions reduction activities, with targets that we will report against each year. We will publish this in our 2023 annual report and accounts, setting out our approach to reducing emissions by 50% by 2030 and achieving net-zero by 2050.
- We will continue to improve and publish our emissions data reporting.
- We are expanding our network of staff champions to help embed sustainable decision making across the charity.
- We will redesign our procurement criteria to broaden and increase our sustainability expectations of those we trade with.
- We will complete internal ESG assessments on the charity and look to align ourselves with external standards and groups to embed our commitments.

About our emissions commitments

We are committing to reduce all our emissions (scope 1, 2 and 3) by 50% by 2030 and to achieving net zero by 2050. We aim to be as transparent as possible in our plans to achieve this and how we are measuring and evidencing our progress.

At the moment we have good and externally collected and assessed scope 1 and 2 emissions and some scope 3 transport emissions. Our commitment is to reduce our emissions by 50% from our 2019 levels. For scope 1 and 2 baselines, these are based on the 2019 levels, and we will develop a comprehensive scope 3 map during 2022 for our scope 3 base line.

We have some activities already in place for reducing some of scope 1 and 2 emissions, and we will continue to look for sensible initiatives which we can get on with quickly. However, we expect our indirect upstream and downstream activities (scope 3) to make up the majority of our emissions. We are therefore taking the time in 2022/23 to comprehensively understand these and to develop a strategy based on data to allow us to make better decisions and more effective use of time and resources.

We have decided to use our 2019 data for a baseline as this was a key year in our existing sustainability planning and investment. We moved into our new head office, which is designed to excellent sustainability standards – being rated BREEAM Outstanding. We also planned our investment to put LED lighting into our 585 shops. We have initiated our expansion of Cancer Research UK Super Stores, opening eight between 2019 and end 2021 with more planned in 2022. As a result, we feel it is important to also capture our growth which increases our emissions.

During COVID-19 we have seen reductions in our emissions through office, lab and shop closures, but we do not expect to see long-term reductions from this as our shops and labs return to pre-COVID working patterns with 2020-2021 not being representative of our typical GHG profile. While some long-term reductions will come from more flexible working in our head office, we will include estimates of the energy use of staff working from home for a more accurate picture.

Championing sustainability



Dr Charlotte Frankling



Dr Sophie Bennett

Dr Charlotte Frankling and Dr Sophie Bennett are Sustainability Champions at Cancer Research Horizons in the Francis Crick Institute and Cambridge Babraham Research Campus. As part of the Lab Sustainability Network, a volunteer group of CRUK scientists committed to creating sustainable labs, they have helped deliver a range of initiatives.

These included saving water by reusing incubator water for disinfection and cleaning; sourcing sustainable items, moving from plastic to reusable glass where possible and recycling various items when it wasn't; buying bulk packed items instead of individually wrapped ones; and showing it is safe to run freezers at -70°C rather than at -80°C, saving and 0.29 tonnes of CO₂.

As part of this drive, staff set themselves sustainability objectives. Thanks to their work, the London site achieved NHS Green Impact Silver Award and both sites built on their LEAF Bronze Award in 2020 with Silver Awards in 2021.

Our 2021 environmental data and methodology in detail

We are reporting our energy use and emissions on a calendar basis (1 January 2021 to 31 December 2021) to ensure we have a complete reportable data set.

Our environmental data is compiled and analysed by ECA Business Energy. All our environmental reporting data, methodological approach and final figures are independently audited by CLS Energy.

Emissions Detail by Scope

		Location based method			Market based method
Scope	Units	Base year 2019	Previous year 2020	Current year 2021	Current year 2021
Scope 1 Combustion	tCO2e			1,539	1,539
Scope 1 Transport	tCO2e			622	622
Scope 1 Facility Operation	tCO2e			0	0
Total Scope 1	tCO2e	2208	1,898	2,161	2,161
Total Scope 1	kWh			11,039,126	11,039,126
Scope 2 Purchased Electricity	tCO2e			3,808	1,893
Scope 2 Purchased Heat	tCO2e			436	436
Scope 2 Purchased Cooling	tCO2e			51	51
Total Scope 2	tCO2e	5312	3,856	4,294	2,380
Total Scope 2	kWh			20,440,977	20,440,977
Scope 3 Mandatory Transport	tCO2e		130	57	57
Scope 3 Voluntary Transport	tCO2e		368	113	113
Scope 3 Transmission and Distribu-tion	tCO2e			380	380
Total Scope 3	tCO2e	2422	830	550	550
Total Scope 3	kWh			230,257	230,257
Total All Scopes	tCO2e	9,942	6,584	7,006	5,091
Total All Scopes	kWh	34,158,263	27,774,956	31,710,360	31,710,360

Emissions Detail by Fuel Type

		Location based method			Market based method
Fuel type	Units	Base year 2019	Previous year 2020	Current year 2021	Current year 2021
Electricity	tCO2e			3,808	1,893
Natural Gas	tCO2e			1,537	1,537
Transmission & Distribution	tCO2e			380	380
Purchased Heat - Electricity	tCO2e			432	432
Purchased Cooling - Electric-ity	kWh			51	51
Biomass Wood Pellets	tCO2e			0	0
Biomass Wood Chips	tCO2e			3.51	4
Fuel Oil	tCO2e			0	0
Kerosene	tCO2e			2	2
Diesel	kWh			370	370
Petrol	tCO2e			178	178
Unknown Vehicle Fuel	tCO2e			152	152
Rail	tCO2e			16	16
Air	2422			76	76
F-Gas				N/A	N/A
Total	tCO2e		0	7,006	5,091
Electricity	kWh		19,663,180	17,932,213	17,932,213
Natural Gas	kWh		4,907,141	8,392,172	8,392,172
Purchased Heat - Electricity	kWh			2,034,660	2,034,660
Purchased Cooling - Elec-tricity	kWh		236,494	242,129	242,129
Biomass Wood Pellets	kWh		368,262	0	0
Biomass Wood Chips	kWh		211,594	231,975	231,975
Fuel Oil	kWh		145	0	0
Kerosene	kWh			8,060	8,060
Diesel	kWh		3,392,847	1,564,084	1,564,084
Petrol	kWh		708,224	775,252	775,252
Unknown Vehicle Fuel	kWh			529,816	529,816
Total	kWh	34,158,263	27,774,956	31,710,360	31,710,360

Year on Year Emissions

		Base year	Previous year	Previous year	% Change vs base	% Change vs 2021
Country	Units	2019	2020	2021		
Location Based	tCO2e	9,942	6,584	7,006	-30%	6%

The carbon figures have been calculated using the BEIS 2021 carbon conversion factors for all fuels.

The intensity measurement of turnover has been selected in order to compare emissions with organisation growth and for consistency with similarly reporting organisations.

Intensity Ratio - tCO2e / FTE

Year	Location based	% Change vs previous year
2021	2.01	10%
2020	1.82	-33%
2019	2.71	
FTE's 2021:	3489.10	

Green House Gas breakdown totals

	tCO2e	tCO2	tCH4	tN20
	6977.39	6915.23	23.98	38.27
Cash Figure	28.46			
	7005.85	6915.23	23.98	38.27

Green House Gas in detail

		Unit	Figure	tCo2e	tCO2	tCH4	tN20
	Electricity	kWh	17,932,213	3807.55	3768.63	14.35	24.57
	Natural Gas	kWh	8,392,172	1537.11	1534.26	2.10	0.84
	Purchased Heat - Electricity	kWh	2,034,660	432.02	427.60	1.63	2.79
	Purchased Cooling - Electricity	kWh	242,129	51.41	50.89	0.19	0.33
	Transmission and Distribtution	kWh	20,209,002	379.73	375.89	1.41	2.43
	Biomass Wood Chips	kWh	231,975	3.51	0.00	3.51	
	Kerosene	kWh	8,060	1.99	1.98	0.00	0.00
	Diesel	kWh	1,564,084	370.47	364.98	0.03	5.46
	Petrol	kWh	775,252	178.15	177.04	0.58	0.53
	Unknown Vehicle Fuel	Miles	472,333	130.35	129.39	0.13	0.83
Air	Domestic	Km	93,455	22.98	22.85	0.01	0.11
Air	Short Economy	Km	1,960	0.30	0.29	0.00	0.00
Air	Short Business	Km	2,816	0.64	0.63	0.00	0.00
Air	Long Economy	Km	94,338	13.95	13.88	0.00	0.07
Air	Long Premium Economy	Km	57,951	13.71	13.64	0.00	0.07
Air	Long Business	Km	41,499	17.80	17.71	0.00	0.09
Rail	Rail Domestic	Km	443,478	15.74	15.57	0.03	0.14
Rail	Rail International	Km	688	0.003	0.003	0.000	0.000

Green Electricity Tariff Detail UK

Tariff type	kWh	kWh percentage for electricity	kWh overall percentage	tCO2e	tCO2e reduction %*
Green	9020908	50%	28%	0	50%
Brown	8911305	50%	28%	1,893	

*Market based emissions vs location based emissions S2 Electricity

Methodology and disclosure

Cancer Research UK is reporting in line with the March 2019 BEIS Environmental Reporting Guidelines: Including Streamlined Energy and Carbon Reporting guidance, and the EMA methodology for SECR Reporting. All measured emissions from activities which the organisation has operational control over are included as required under The Companies (Directors’ Report) and Limited Liability Partnerships (Energy and Carbon Report) Regulations 2018, unless otherwise stated in the exclusions statement.

We have taken an operational control approach, meaning that 100% of emissions from operations over which Cancer Research UK and its subsidiaries have operational control have been reported.

Our reporting methodology is based on the World Resources Institute/World Business Council for Sustainable Development Greenhouse Gas Protocol Corporate Accounting and Reporting Standard (revised edition), and the UK Government’s Environmental Reporting Guidelines, 2019.

Data from the following schemes that client name report within has been used to support the calculations: CCA, EU ETS, CRC. The following emissions factors have been used within these schemes:

Fuel type	Emissions conversion factor source
UK Electricity – location based (excluding transmission and distribution), UK Gas, Petrol, Diesel, Unknown Vehicle Fuel	Department for Business, Energy and Industrial Strategy 2021
Travel Expenditure - Emissions Conversion Factors	UK Government BEIS ‘Environmental Reporting Guidelines 2019

F-Gas consumption has not been collected or included in the SECR report. F-Gas was also not included in the previous 2 years SECR reports. We think it is small but will report on this in 2023

All emissions calculations are derived from activity data. The primary sources used for energy and fuel are billing data and delivery notes. Meter readings are only used where there is no billing data. Where gaps of more than one day in energy data were identified, we have estimated the missing data using a daily consumption rate for the property calculated from a comparable period. If no data was available for the property, data from a comparable building would be used to calculate an area-based consumption rate. In 2021 no pro-rata or benchmarking data estimating has been used.

For business mileage, mileage claims were used. For other business travel, sources included travel agent reports, expense claims and credit card reports. The UK Government’s 2021 emission factors were used to calculate carbon emissions from activity data, except for those business travel expenses where the only data available was spend. In these cases, supply chain emission factors from Defra’s 2019 Environmental Reporting Guidance were used.

Our emissions are reported as metric tonnes of carbon dioxide equivalent, which incorporates all six gases regulated by the Kyoto Protocol.

Exclusions statement and voluntary disclosures

Other than the Beatson, we do not include Cancer Research UK-branded research institutes and centres, as these are not part of our organisation structure and we do not have operational control over them. Additionally, we have excluded all managed offices and laboratories – those where we do not receive a separate charge for energy. Our leased fleet includes our company cars and vans. Business travel mileage includes staff and volunteers driving their own vehicles for Cancer Research UK business (known as ‘grey fleet’).

Scope 2 purchased electricity does not include the transmission and distribution element as this is owned by the supplier.

As in previous years, we have voluntarily included some Scope 3 emissions from business travel by staff and volunteers (other than travel by van, company car or private car), such as air, rail, coach, public transport and taxis. Most air and rail travel data were provided by our travel agents, whereas most public transport and taxi data was collated from expense claims.

For more information please contact
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Together we will beat cancer