

Understanding the Impact of COVID-19 on Public Health Wales' Emissions



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Public Health Wales

Public Health Wales commissioned a study to understand the impact of COVID-19 on PHW's greenhouse gas emissions.

Four areas were considered:



Procurement



Travel



Homeworking



Business/Site Operations

What was measured?

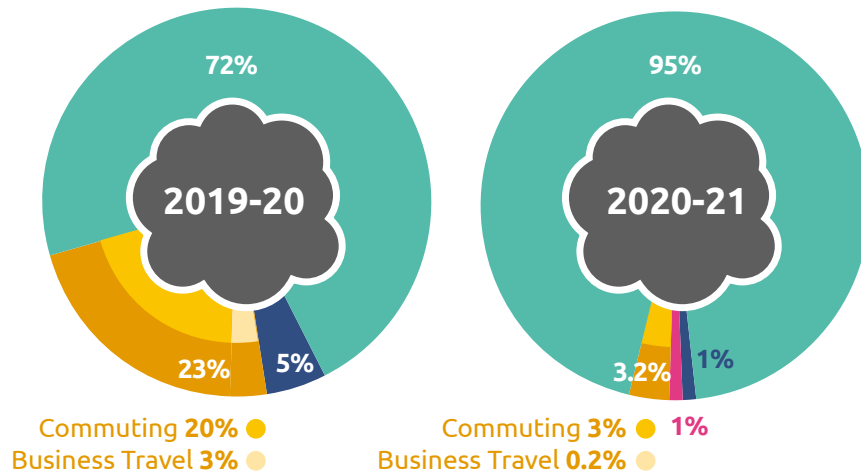
We measured our emissions for 2019/20 and 2020/21 and looked at staff homeworking emissions.

Why?

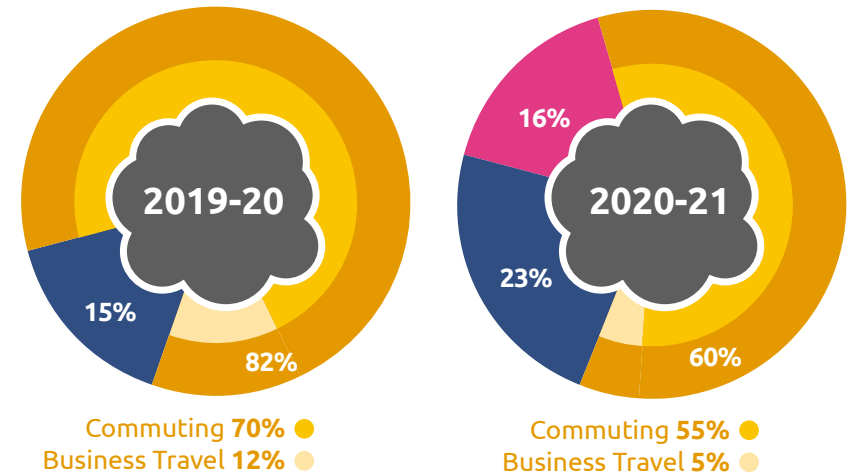
The findings and key recommendations of this study will be used to inform ongoing discussions around implementing more sustainable future ways of working and achieving our Net Zero ambitions.

Key findings of the study*

PHW total emissions (including Procurement)



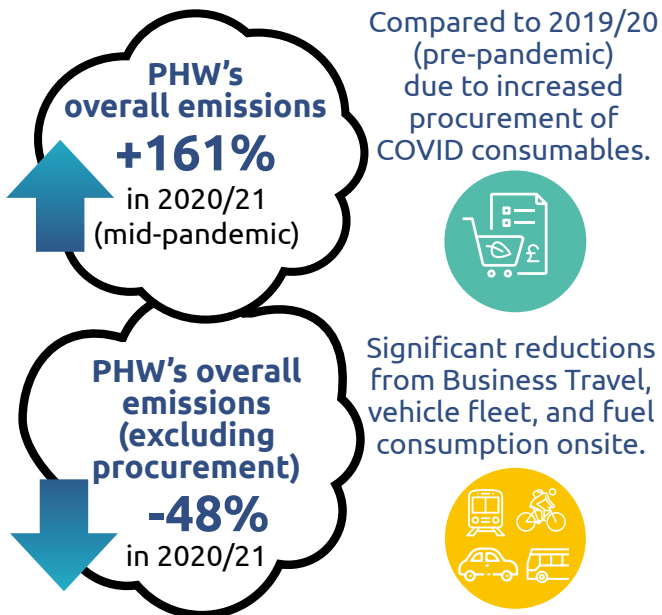
PHW total emissions (excluding Procurement)



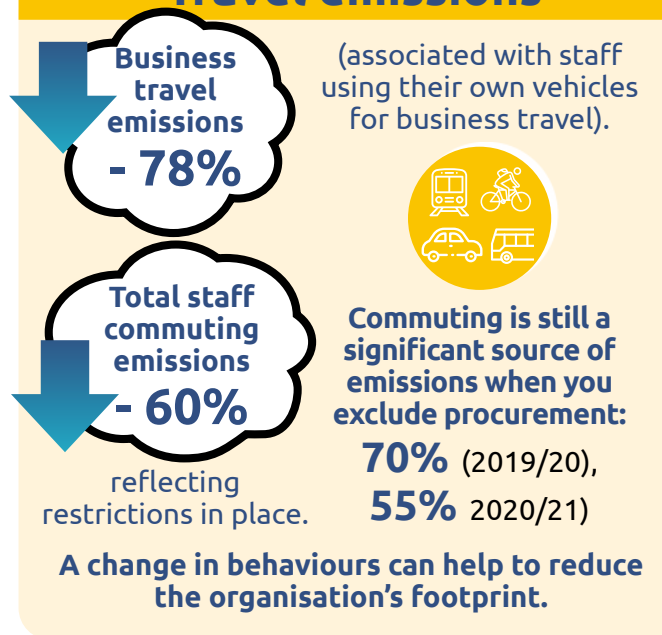
*Data has been provided excluding procurement emissions to highlight the sources which PHW has the most control/ opportunity to reduce emissions

Comparing the 2019/20 and 2020/21 reporting years

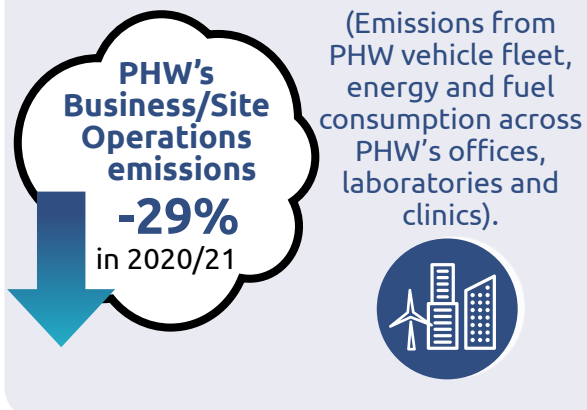
Overall emissions



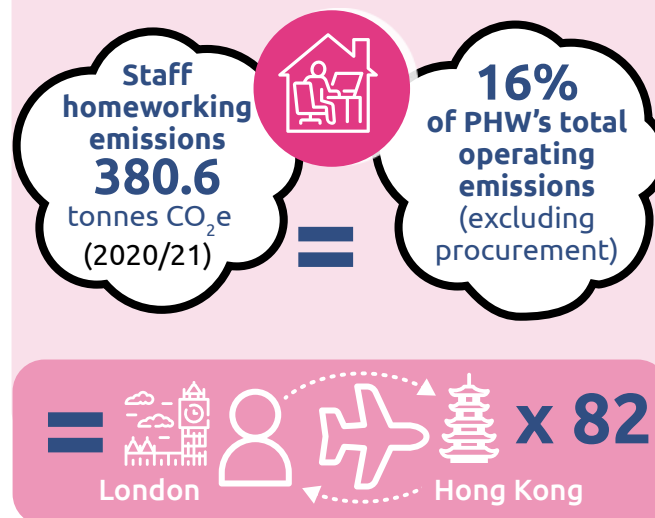
Travel emissions



Business/Site emissions



Homeworking emissions



Overall recommendations

- PHW needs to continue its efforts in reducing emissions in all areas, with a focus on procurement, travel, buildings, and homeworking in order to work towards achieving Net Zero.
- Engage with supply chain and wider NHS partners to think about sustainable procurement hierarchy.
- Support flexible working through "Work How It Works Best" initiative.
- Increase the proportion of PHW's energy sourced to green/renewable tariffs.
- Work closely with waste contractors and building landlords to improve waste collection data.
- Incentivise staff to use more sustainable travel options and revise travel policies to reduce unnecessary business travel.
- Revise building heating and air conditioning systems to reduce the amount of unnecessary energy used.
- The Health and Sustainability Hub's [Cutting our Carbon Emissions](#) infographic provides guidance on how to reduce your emissions.
- All public bodies in Wales including PHW strive to incorporate the Well-being of Future Generations Act towards helping contribute to a more resilient and prosperous Wales, and think about the long-term impacts of the decisions that we as a business make.



Focus on Procurement Emissions



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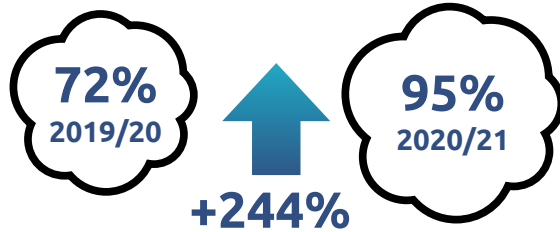
Procurement is the goods and services a public body buys to enable it to function and deliver its priorities and services

In Wales, procurement is one of the key corporate areas for change identified in the Well-being of Future Generations Act, encouraging us to think about how and where to spend money in the interest of current and future generations.



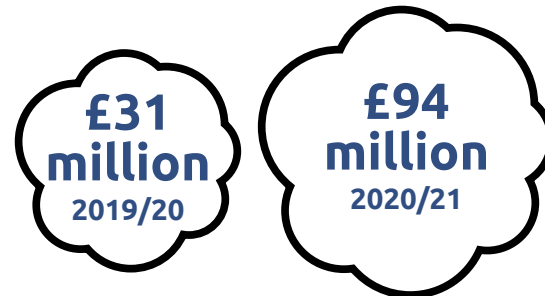
Key messages

PHW's procurement and supply chain emissions accounted for the majority of PHW's total emissions



This is due to COVID-19 and the PPE equipment and consumables required.

PHW's Procurement costs



The current way of calculating procurement emissions does not factor in sustainable procurement choices (which can sometimes cost more) with reductions only being achieved by spending less.

Procurement emissions represent a significant decarbonisation challenge, common with many public sector organisations

Welsh public sector spends **over £7 billion** each year on procurement

62% of the carbon footprint for NHS Wales was from purchase of medical supplies in 2018/19

Recommendations for PHW



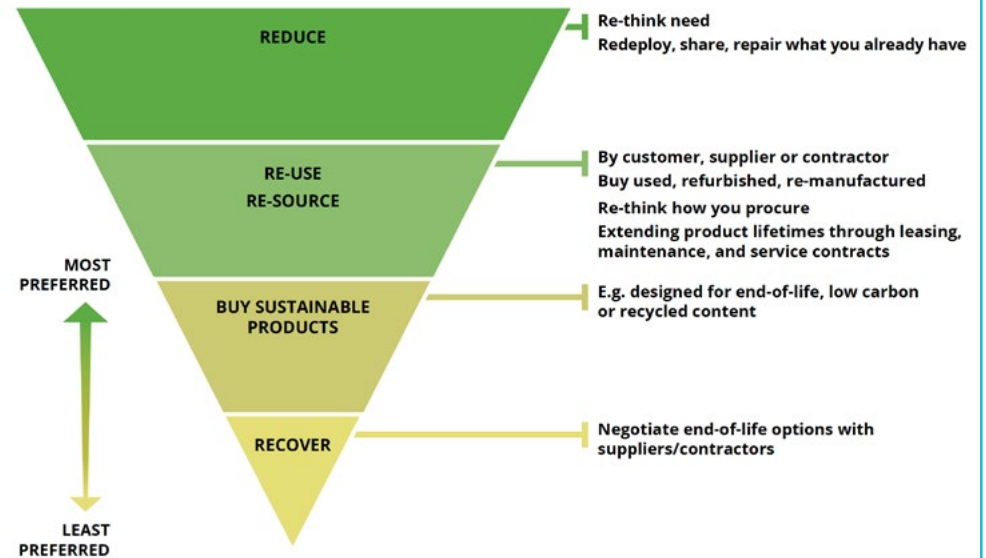
As part of the Well-being of Future Generations Act, sustainable procurement allows us to reduce our impact on the environment and support local businesses, to achieve a globally responsible Wales.

- Engage with your supply chains to find out what they are doing to reduce carbon emissions associated with goods and service delivery.
- Capture improvements to reduce emissions in the supply chain to support PHW reporting on decarbonisation activities and emissions.

How can you help?

- Sustainable procurement can mean not buying things at all, buying energy and resource efficient goods, think ethically and buy local goods to support the local economy.
- Before you buy, look at options to share, lease or reuse items and encourage suppliers to use less packaging.
- Follow the Sustainable Procurement Hierarchy to consider environmental impact when making purchasing decisions.

Sustainable Procurement Hierarchy



- Consider the whole life cycle costs – including creating raw materials, purchasing/ leasing, maintenance, operation, training, and disposal.

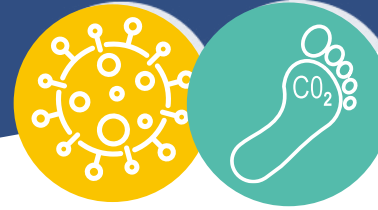
- The Hub's [Be the Change - Reducing our Waste Measurements](#) guide highlights some of the practical ways you and your team can reduce the amount of waste you produce to create a lower carbon (greener) society.

- The Hub's [Be the Change - Procurement that doesn't cost the earth](#) guide highlights how we can think about sustainability as we go through the procurement process, to help reduce our carbon footprint.





Focus on Homeworking Emissions



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Homeworking emissions include the greenhouse gas (GHG) emissions resulting from the use of power, heating and waste disposal by staff who work from home.

Homeworking emissions data has been calculated through a survey shared with staff, completed by 166 members of staff with the results extrapolated for all staff members in PHW.

Key messages*

Emissions produced by Homeworking



62%

Heating (gas, fuels, and electricity)



24%

Waste (general waste and recycling)



14%

Power (location-based electricity)

The use of domestic heating was the largest contributor to homeworking emissions accounting for 62% of overall homeworking emissions.

Home/agile working has a lower emission footprint

compared to a combination of Commuting and Business/ Site Operation emissions (based on the data we collected).

16%

Home/
agile working



23%

Business/ Site
Operation emissions

Homeworking can bring benefits

such as work-life balance, less commuting, fewer distractions, adapting your environment to suit you,

but it can also

diminish social interaction, increase social isolation and stress and might not be suitable for all.



Considering this and due to the cost-of-living crisis PHW encourages flexibility of choosing where staff would prefer to work through the Work How it Works Best approach.



Homeworking
emissions



16%
of PHW's total
emissions
2020/21

39%
of respondents to the survey were on green energy tariffs for their electricity supply.



*Data has been provided excluding procurement emissions to highlight the sources which PHW has the most control/ opportunity to reduce emissions



Recommendations for PHW

Welsh Government wants to see 30% of the workforce in Wales working remotely on a regular basis, highlighted in their [Remote Working Policy, September 2020](#).

As part of the Well-being of Future Generations Act, sustainable home and agile working ensures our decisions influence our future health and reduce our impact on climate change, to achieve a healthier, resilient and globally responsible Wales.

- Appreciate the positive and negative health and well-being benefits of homeworking for staff as we embed the Work How it Works Best initiative.
- Take into consideration the impacts of the cost of living crisis and the reduction in overall carbon emissions as part of the Work How it Works Best initiative. Provide guidance to staff on improving energy efficiency in their home, as well as providing further information on green/renewable energy tariffs.
- Support suggestions made by staff to reduce homeworking emissions and their request for support and guidance.
- Consider [Healthy travel options](#) when commuting to work.

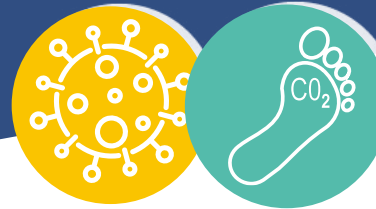
How can you help?

- Sustainable homeworking includes using IT sustainably, focusing on mental well-being, using local seasonal produce for lunch and maintaining a work-life balance.
- Replace light bulbs or light fittings with energy efficient lighting - they use less energy and last a lot longer than incandescent lighting and can help lower your energy bill.
- Consider switching to a green energy tariff and turning your thermostat down.
- Use a sustainable search engine - sustainable search engines donate some of their profits to environmental projects, such as tree planting or ocean cleaning, or they donate to environmental charities.
- The Hub's [Home and Agile Working guide](#) under the Sustainable Steps series helps highlight some of the practical ways to work sustainably at home.
- Seek guidance to improve energy efficiency at home.
- Aim to have a healthy lunch using local produce.
- If you need to travel when working at home, try to use public transport or walk or cycle where possible.





Focus on our Business/Site Emissions



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Business/ Site emissions includes energy and fuel consumption across PHW's offices, laboratories, and clinics, PHW owned fleet vehicles and waste.

PHW sites mainly include PHW's offices, laboratories, and clinics, operating out of existing NHS hospitals and clinics.

Key messages*

Business/Site emissions accounted for

15%
of PHW's total emissions
2019/20

23%
of PHW's total emissions
2020/21



Overall there was reduction of



-29%
PHW's Business/
Site Operations
emissions
between 2019/20
and 2020/21



The most significant Business/ Site Emission reductions were



PHW's gas oil
consumption

-62%

and the operation of
PHW's vehicle fleet



-67%

Gas consumption



+9.9%
in 2020/21
compared to
2019/20

Potentially due to increased heating requirements in our buildings which remained open or were used as temporary testing/ vaccination clinics.

Grid electricity



only marginally
decreased by
-1.4%
in 2020/21

Potentially due to increased consumption at sites which remained open during the pandemic.

PHW fleet travel

reduced from



This reflects the reduction in non-essential clinics/ support services provided as a result of the pandemic.

*Data has been provided excluding procurement emissions to highlight the sources which PHW has the most control/ opportunity to reduce emissions

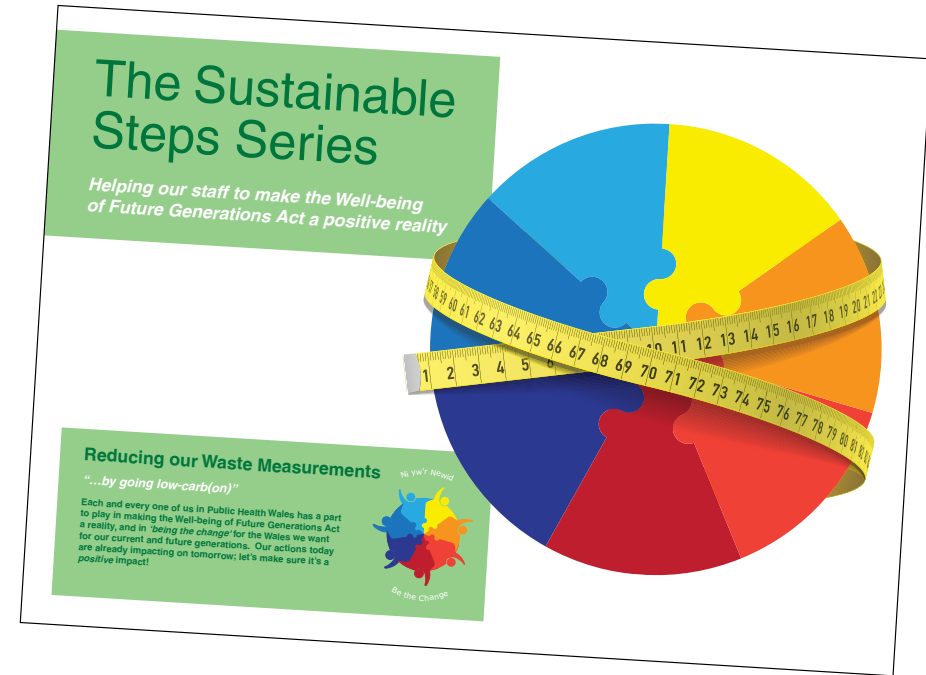


Recommendations for PHW

As part of the Well-being of Future Generations Act, reducing emissions from buildings and site operations help transition to a low carbon society and ensures we use natural resources efficiently, to achieve a prosperous and resilient Wales.

- Reduce Business/ Site emissions to achieve Net Zero 2030 target.
- Revise existing building management systems (heating/ cooling/ lighting schedules) to reduce the amount of unnecessary energy consumption associated with offices, clinics and laboratories on reduced occupancy.
- Improve the understanding of how energy is used within buildings and sites to improve energy management and increase energy efficiency across the portfolio.
- Increase the proportion of energy sourced from green/ renewable tariffs.
- Work closely with waste contractors and building landlords (where offices are co-located in shared sites) to improve the amount of waste collection data which is recorded.

How can you help?



- Use the correct bins to recycle items when at a PHW site and think about the waste items you are generating and how they could be reduced or removed.

For more information see the Hub's [Be the Change – Reducing our Waste Measurements e-guide](#).
- Report issues with heating / cooling in buildings.



Focus on Travel (Business Travel and Commuting) Emissions



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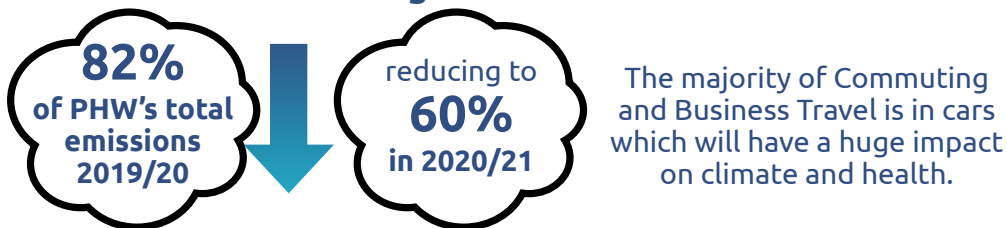
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Travel emissions include staff commuting and business travel. Staff commuting refers to use of personal vehicles and public transport by staff commuting to and from their place of work. Business travel refers to staff using their own vehicles (Grey Fleet), hire cars, taxis, and coaches to travel for PHW business, plus the use of couriers.

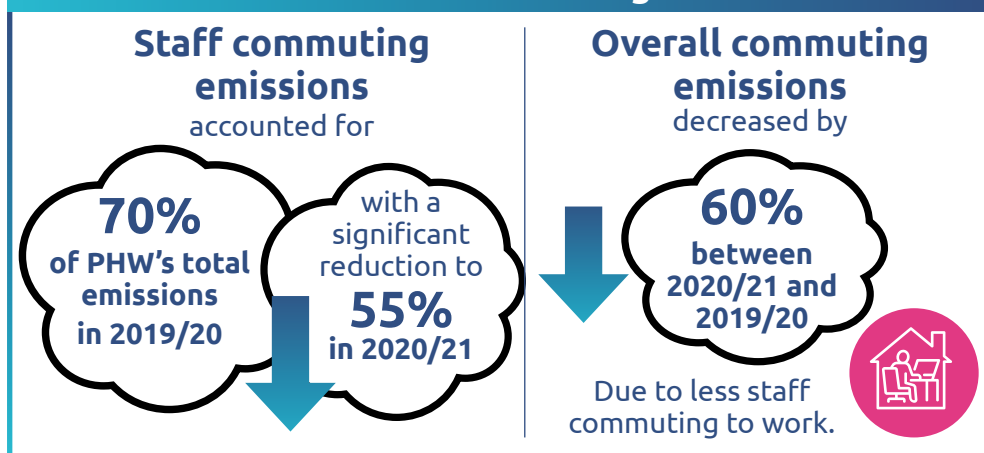
Commuting emissions data has been calculated through a survey shared with staff, completed by 95 members of staff with the results extrapolated for the percentage of staff commuting in 2020/21.

Key messages*

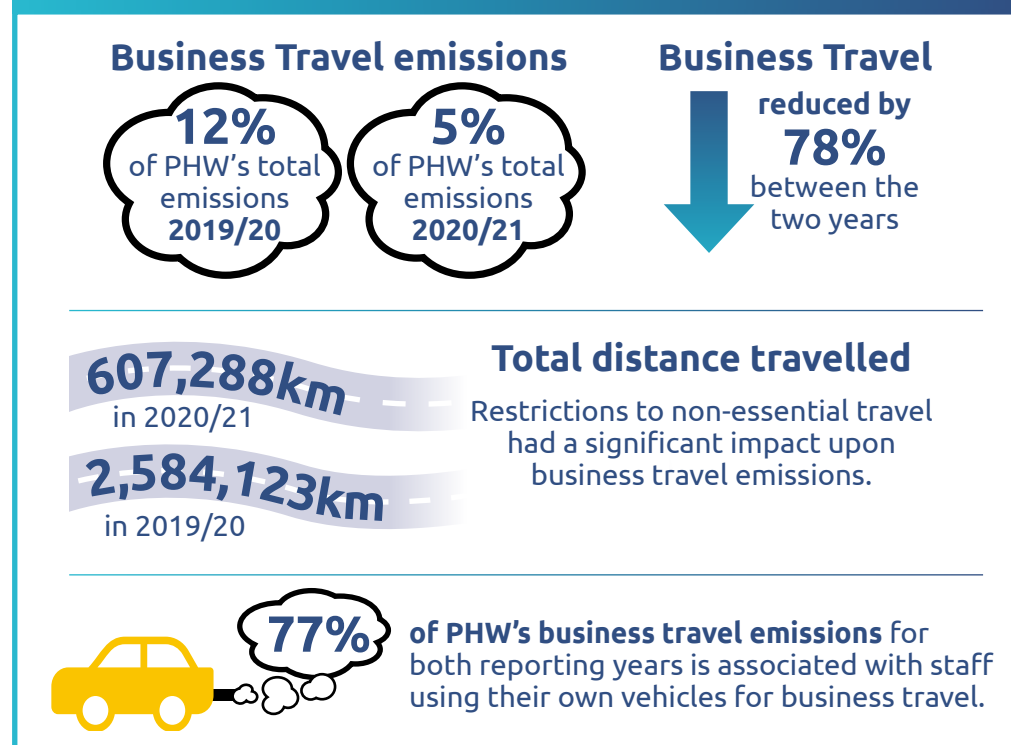
Commuting and Business Travel



Staff Commuting



Business Travel



*Data has been provided excluding procurement emissions to highlight the sources which PHW has the most control/ opportunity to reduce emissions



Recommendations for PHW

As a part of the Well-being of Future Generations Act, sustainable travel options help improve the physical and mental well-being and ensures that our choices and behaviours influence our future health and achieve a Healthier Wales.

- Consider opportunities to encourage and support staff (where feasible) to adopt flexible working practices, to reduce emissions from staff commuting.
- Incentivise staff to use public transport and/or active travel options when commuting as well as opportunities to dis-incentivise the use of personal vehicles where possible through the 'Work How it Works Best Initiative'.
- Revise internal Travel Policies to reduce unnecessary business travel and encourage staff to consider more sustainable options (public transport/ car share/ active travel/ teleconferencing) for necessary business travel.
- Promote the organisation's Healthy Travel Charter to staff.
- Conduct further research and data collection to increase the representative sample size to better understand commuting behaviours across the whole organisation.

How can you help?

- Find out about the [Healthy Travel Wales/Cardiff](#) charter and how you could support the commitments.



- Avoid unnecessary travel whether for commuting or for work and if you have to travel, aim to use public transport or walk or cycle where feasible.



For more information see the Hub's [Be the Change – Walking our Talk](#) e-guide.

- Read the [Sustainable Travel Toolkit](#) to find out how you can support active and sustainable travel.
- Try to use public transport as much as possible and consider car sharing.
- Make use of PHW's Cycle to Work Salary Sacrifice Scheme.
- When arranging meetings and events, choose venues that are easily accessible by public transport.
- Promote and encourage public transport and active travel for meetings and events.