



Llywodraeth Cymru
Welsh Government

GUIDANCE, DOCUMENT

Welsh Procurement Policy Note WPPN 12/21: Decarbonisation through procurement - Addressing CO₂e in supply chains

WPPN 12/21 advises the Welsh public sector on the actions that can be taken to address CO₂e emissions in supply chains for purchased goods and services to help them meet the 2030 target for a net zero public sector.

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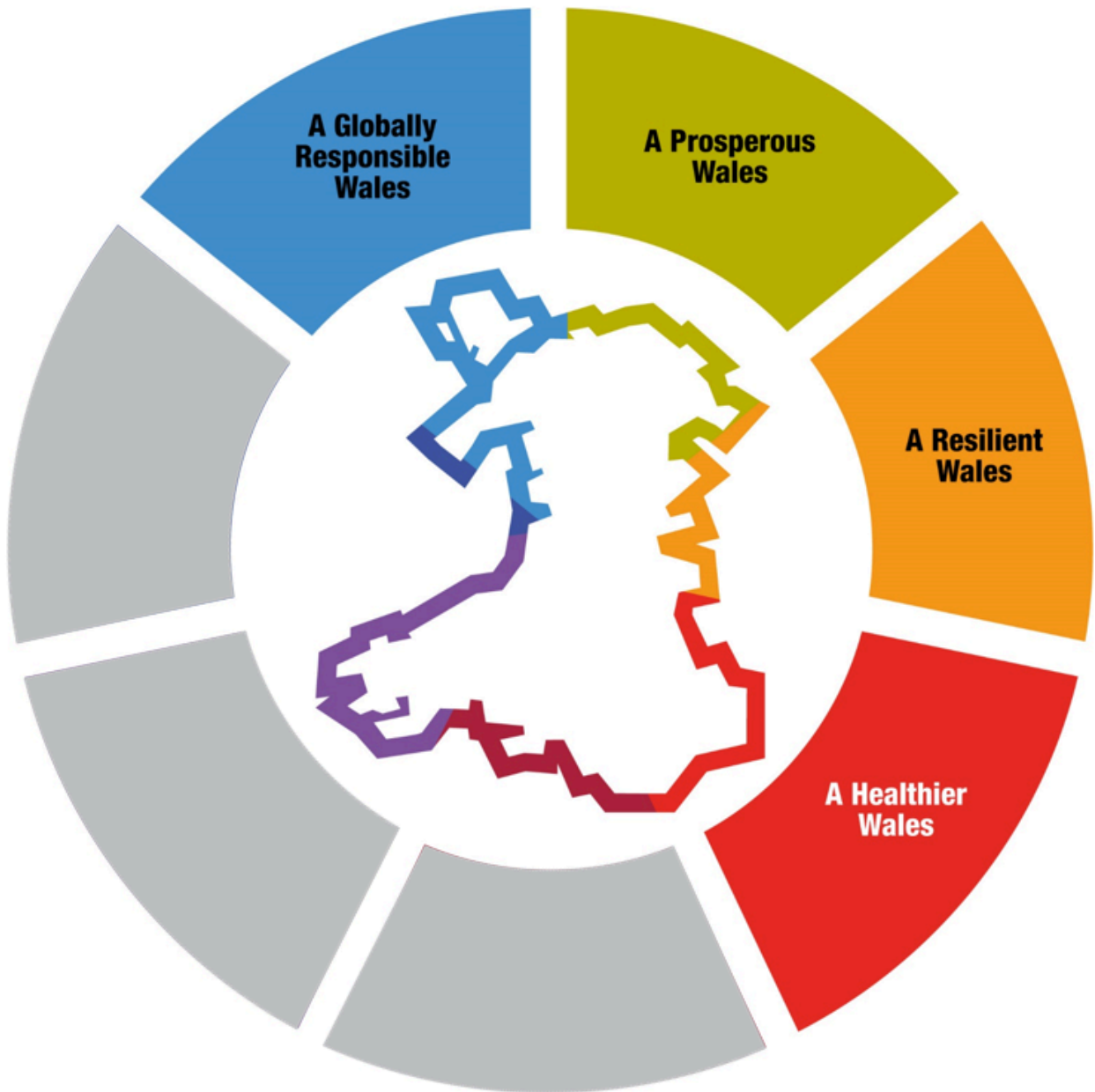
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Well-being of Future Generations Act's well-being goals supported by this WPPN



- A prosperous Wales

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- A resilient Wales
- A healthier Wales
- A globally responsible Wales

1. Points to note

- The information set out in this document is not legal advice and is not intended to be exhaustive – contracting parties should seek their own independent advice as appropriate. Please also note that the law is subject to constant change and advice should be sought in individual cases. This document reflects the position as at November 2021.
- This Welsh Procurement Policy Note (WPPN) builds on, and is consistent with, the Wales Procurement Policy Statement and the Public Contracts Regulations 2015 that remain unaffected by the UK Statutory Instrument (SI) no: 1319 The Public Procurement (Amendment etc.) (EU Exit) Regulations 2020, effective from 1 January. The SI corrects deficiencies arising from the UK's exit from the EU and implements the relevant aspects of the UK/EU Withdrawal Agreement.
- This note therefore assumes a certain level of knowledge of public procurement. It is available via the Welsh Government website GOV.WALES and any queries should be directed to CommercialPolicy@gov.wales or via the [Welsh Government customer services](#).

2. Purpose

The purpose of this WPPN is to provide public sector bodies in Wales with advice on the actions that can be taken on Scope 3 Green House Gas (GHG) CO₂e emissions with a particular focus on the purchased goods and services element. This supports the UK Net Zero 2050 target and more specifically Welsh

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Government's ambition of achieving a **Net Zero Welsh public sector by 2030**. It is intended to support, and be read in conjunction with the **Welsh Public Sector Net Zero Carbon Reporting Guide** (Welsh Government, 2021) the **Net zero carbon status by 2030: A route map for decarbonisation across the Welsh public sector** (Welsh Government July 2021) and **WPPN 06/21: Decarbonisation through procurement - Taking account of Carbon Reduction Plans** (Welsh Government Sept 2021).

Note

CO₂e = Carbon dioxide equivalent, is a term for describing different greenhouse gases in a common unit. For any quantity and type of greenhouse gas, CO₂e signifies the amount of CO₂ which would have the equivalent global warming potential GWP impact.

3. Background

3.1 Greenhouse Gas (GHG) Protocol Scope 1, 2 and 3 emission sources

While procurement has a role in the reduction of elements of Scope 1, 2 and 3 emissions, over which the organisation has a level of direct influence (for example, emissions arising from their own estate / internal operations - employee commuting / business travel), this WPPN focuses on the purchased goods and services element of Scope 3 emissions.

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| Scope 1 | Scope 2 | Scope 3 |
|---|---------------------------------------|---|
| Fuel combustion Company vehicles Fugitive emissions | Purchased electricity, heat and steam | *Purchased goods and services* Business travel Employee commuting Waste disposal Use of sold products Transportation and distribution (up- and downstream) Investments Leased assets and franchises |

Source: [Carbon Trust Briefing: What are Scope 3 emissions?](#) The Carbon Trust

The importance of addressing the purchased goods and services element of Scope 3 is underlined by research that shows that these can account for around 60% of an organisations total CO2e footprint (59% Natural Resources Wales Carbon Positive Project 2017; 62% NHS Wales Decarbonisation Strategic Delivery Plan 2021-2030 March 2021; 58% Denbighshire County Council in 2019/20). The particular challenge presented by Scope 3 emissions from supply chain activity is that while they arise from the organisations demand for goods, services or works, they occur in supply chain activities that organisations do not directly own or control. However, those supply chain activities can be influenced by the purchasing organisations procurement processes (procurement strategies – how we approach the market; how we specify requirements; evaluate tenders and set KPIs) by ensuring the anticipated outcomes are delivered through our contract management relationships and also by going further by incentivising innovation / continuous improvement over the period of the contract.

Consideration of Purchased Goods and Services (PGS) covers all the activities that go with supporting the manufacture and delivery of PGS. This includes the Waste disposal (End of use/ End of life down-stream) and wastes arising from

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Estates functions, covered by Facilities Management contractual arrangements that can be controlled via the procurement process. For example by:

- Contracting with businesses organised on Circular Economy (CE) principles (e.g. eco-design, design for disassembly)
- Utilising / requiring Original Equipment Manufacturers (OEM) or suppliers take back of products and/or packaging.
- Including waste disposal requirements in contracts or establishing separate contracts for waste disposal that require waste segregation to minimise residual 'non-recyclable' waste and create revenue streams for recyclable materials in recycle markets.

The following Scope 3 emissions sources (listed in Figure 1) are more appropriately controlled by an organisation's own policies and so are outside the scope of this WPPN:

Business travel

Controlled by HR policies, e.g:

- 'on-line meetings' by default
- where business travel is deemed necessary - Travel & Substance policy that covers 'grey fleet travel' - use of employee's own vehicles for business purposes
- 'vehicle hire' by setting a mileage threshold over which employees must use a car hire contract / framework that only supplies low emission, electric vehicles
- 'rail & air travel' by setting criteria for when rail or air travel should be used.

Employee commuting

Controlled by HR policies, e.g:

- home working by default
- limiting 'on-site' parking
- T&S remuneration for 'off-site' car parking.

Use of sold products (products manufactured / retailed by the org)

- not relevant in the context of public sector organisations as the Welsh public sector bodies (WPS) do not manufacture or produce goods/products for sale, with the exception of NRW.

Transportation and distribution up and down stream of 'sold products'

- not relevant in the context of public sector organisations as WPS do not manufacture or produce goods/products for sale, i.e. materials in and products out. The Transportation and distribution linked to PGSs should be examined and controlled as discussed above.

Investments and Leased Assets / Franchises

– not considered within the scope of the Net Zero Reporting Guide.

4. Guidance

Fundamental to reducing our GHG emissions is understanding where and how these are generated and setting targets and KPIs to gather the data needed to calculate and manage them down and, wherever possible, eliminate them altogether. Data sources are therefore an essential consideration for estimating and monitoring emissions.

4.1 Data sources - CO₂e calculation methodologies

Emissions calculation methodologies can be classified into three levels or Tiers dependent on the data available, moving from Tier 1 with the least accurate data to Tier 3 with the most accurate data.

Tier 3: Supplier specific data submitted by suppliers

This is the most accurate data as they are actual consumption metrics reported by suppliers / contractors / service providers e.g. make and model of vehicles used, fuel in litres, kg or kWh or actual business travel in miles / kilometres, product specific emission factors calculated by the supplier, or organisational emissions allocated to product or service

Tier 2: Average data method

Using industry average emissions data to produce factors against standard units e.g. class/size of vehicles used kg/Co₂e per km /miles, litres of fuel, tonnes; average could mean emissions per unit purchased e.g. typical lifecycle emissions for a purchased laptop from a lifecycle inventory database, etc. For example, Department for Energy Security and Net Zero [Greenhouse gas](#)

reporting: conversion factors 2020.

Tier 1: Spend-based data

This is the least accurate data as it relies on proxy data such as the Supply Chain emission factors, example at Annex 1, for every pound spent in a generic category a weight of CO₂e in kilograms is calculated. For example, for Electrical equipment every pound spent is assumed to generate 0.62 kg/CO₂e. This approach is most useful in the early stages of understanding your CO₂e spend profile and provides a starting point for planning actions to reduce your supply chain emissions and identifying opportunities to gather Tier 3 data.

While the preference should always be to use Tier 3 data, in practice you will need to take a blended approach. The following are suggested strategies for making the most of the data available to you. These strategies will be considered in 2 parts. Firstly, what actions can you take immediately, Getting started / Quick Wins (section 4.2) and secondly how to build CO₂e reduction into your organisations procurement strategy and future contracts, Addressing CO₂e in the procurement cycle (section 4.5).

4.2 Getting started / quick wins

4.2.1 Step 1 Spend / Expenditure analysis

How you approach this depends on how the spend on external suppliers is classified in your organisation and the systems that are used to manage and monitor that spend. To

4.2.2 Step 2 Identify your current contracts with high / medium CO2e

As your spend analysis will only show you 'what' (in which categories) your organisation has spent its money on, you will need to find out 'how' that money is being spent i.e. what specific goods, services or works are being bought, and what the suppliers / service providers / contractors are required to do i.e. what did the contract specifications and contract terms, conditions of funding require? What day to day activities are being undertaken to deliver the contract?

Step 2.1 Using your spend analysis, work back from spend categories to identify specific contracts and opportunities to act on CO2e reduction, by:

Step 2.1(a) by spend category

- i. Category of spend (rank top level categories by CO2e factor)
- ii. Can the top level category be broken down to sub-categories of spend? (If so, rank categories by CO2e factor)
- iii. Identify departments committing that expenditure (by finding associated cost centre codes, departmental account / budget codes etc.)
- iv. Make enquires with departments or budget holders or, where your organisation is using a contract or framework agreement managed by another organisation the framework managers, to get to contract documentation – spec; award criteria, KPIs, etc.

Or

Step 2.1(b) by Supplier - spend

- i. Identify your top contractors / suppliers / service providers (those you spend most with)
- ii. Identify the categories of expenditure for those contractors (what goods, services or works are they being paid for?)
- iii. Compare those categories to your organisations high CO2e categories (prioritise contractors in high CO2e categories)
- iv. Identify departments committing that expenditure (by finding associated cost centre codes, departmental account / budget codes, etc.)
- v. Make enquires with departments or budget holders or, where your organisation is using a contract or framework agreement managed by another organisation the framework managers, to get to contract documentation – spec; award criteria, KPIs, etc.

Or

Step 2.1 (c) By Supplier – contract

- i. Identify your top contractors / suppliers / service providers (those you spend most with)
- ii. Approach your top contractors / suppliers / service providers and ask them about the contract and who their contract manager / contact point is in your organisation. Once this is known approach the contract managers to get to the contract documentation – specification; award criteria, conditions of contract and understand the day to day activities generated by the contract.

Or

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Step 2.1 (d) By Contracts register

- i. If your organisation has a contracts register, use this to identify contracts that may be in your high CO2e categories and / or to identify your top contractors / suppliers / service providers and follow the steps in a) and b) above.

4.2.3 Step 3 Explore how your current contracts can be used to act on CO2e reduction

Having identified the specific contracts or framework agreements currently in use, establish what, if any, decarbonisation measures have been built into the contract, whether these have been fully applied (if not, can they be activated?) and any management information (MI) data that might be available that would be a useful benchmark or starting point from which to start to take action on CO2e reduction.

While contract specifications / conditions may not have specific reference to decarbonisation, action on climate change etc. they may include contract clauses that could be used to initiate action to address CO2e e.g. that refer to Innovation or Continuous Improvement, Change control or Contract variation. This approach is likely to be most effective if the contract is still in its early stages; when your organisation is a major client and or has a good working relationship with the supplier / service provider / contractor.

Co-operating with you is likely to be beneficial to the development of your suppliers / service providers / contractors, as understanding your decarbonisation objectives will be a source of competitive advantage as other public sector clients begin to specify decarbonisation requirements in their contracts.

If there are no opportunities to take action within the scope of current contracts,

consider early termination of the contract especially if the subject of the contract is a medium to high CO2e risk and better delivery options are available.

4.3 Planning for the future

This section discusses some of the broader commercial considerations that you may need to take into account. Section 4.5 Addressing CO2e in the procurement cycle looks at each stage of the cycle more specifically.

Use the lessons learned from how previous or current contracts have been designed to improve your procurement strategies, specifications, supplier selection and contract award criteria to focus on reducing Scope 3 CO2e emissions in your supply chains. Wherever possible the goal should be to minimise and ideally eliminate processes, materials or activities that cause CO2e emissions. Requiring all bidders to submit a Carbon Reduction Plan as part of the tender will ensure potential suppliers are focused on CO2e reduction (See [WPPN 06/21: Decarbonisation through procurement - Taking account of Carbon Reduction Plans](#)).

As you may well be asking suppliers / service providers / contractors to change:

- their established processes (e.g. reverse logistics to allow for repair and re-use)
- to use different raw materials and components (e.g. with lower embedded carbon, sourced more locally or composed of recycled materials or with higher recycled content)
- how they go about delivering your contract requirements (e.g. using electric vehicles)
- or, to achieve standards, accreditations, e.g:
 - BSI PAS 2050 carbon emissions product labelling for goods and services
 - PAS 2060 Carbon neutral status
 - PAS 2080 management of carbon in infrastructure projects

- **Carbon Trust's Product carbon footprint labels** - cover products who's CFP has been measured, are committed to reducing the CFP; are committed to carbon neutrality; packaging committed to reducing or carbon neutrality
- **GHG Protocol Product Standard** - The Product Life Cycle Accounting and Reporting Standard can be used to understand the full life cycle emissions of a product and focus efforts on the greatest GHG reduction opportunities.
- **ISO14067** - specifies principles, requirements and guidelines for the quantification and reporting of the carbon footprint (CFP), or partial CFP of a product in a manner consistent with International Standards on life cycle assessment (LCA) (ISO 14040 and ISO 14044).

These are likely to require them to invest in their business (R&D, plant, machinery, staffing and training) you will need to consider how to incentivise these changes. For example:

- by extending the maximum period of your contracts to allow time to recoup the costs of that investment
- letting 'commitment contracts' that subject to satisfactory performance guarantee the contract will run to its maximum term, e.g. 4 years, rather than contracts with options to extend, e.g. 2+2 contracts, 2 year minimum contracts with options to extend for additional years which introduce an element of uncertainty and will effect a suppliers confidence to plan beyond the minimum term.
- Bonus payment clauses for achieving key milestones.

At the very start of the procurement planning process, having confirmed there is a business need, consider whether you need to buy, 'own' the asset or whether the need could be met via a lease or managed service arrangement? Consider the CO2e emissions risks and whether these can be eliminated or minimised now, or whether the procurement strategy should include options to allow for upgrades, or switch to new and better options if the market moves during the

period of the contract.

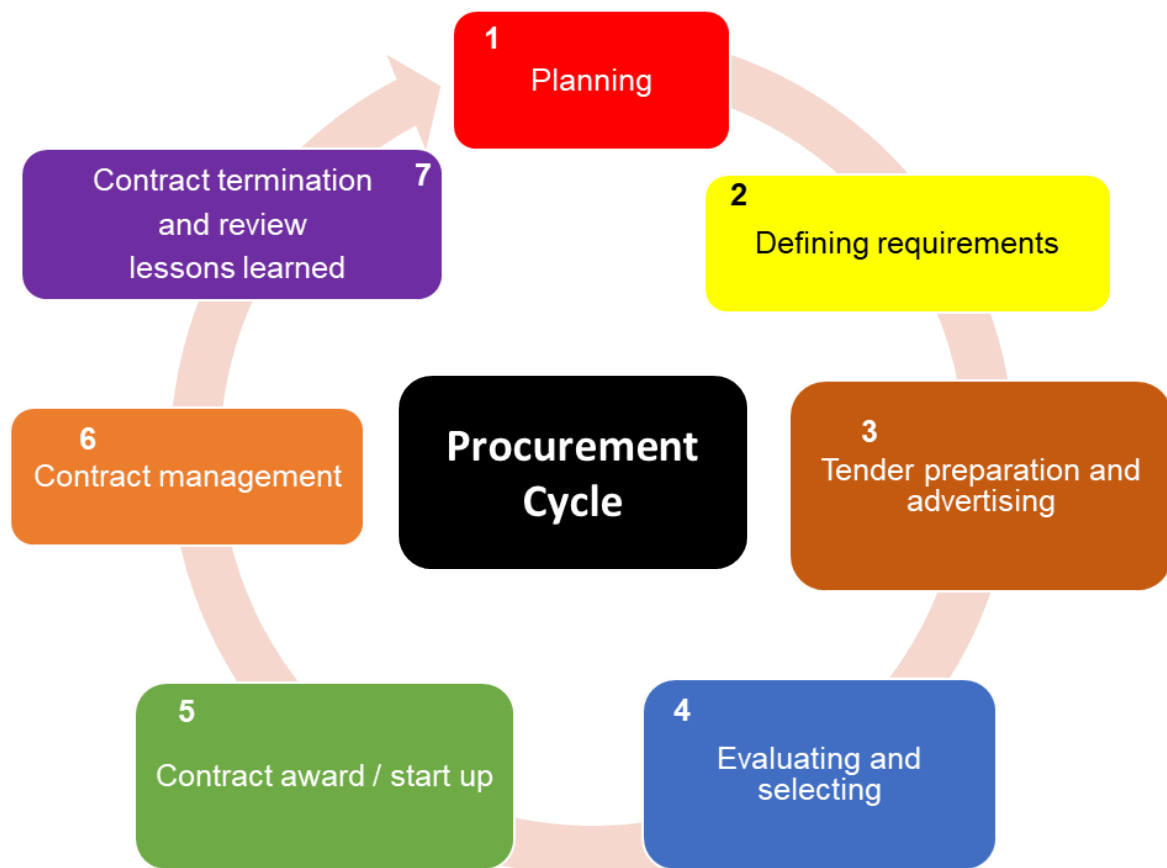
Standard Terms and Conditions are likely to already have an early contract termination clause but establish whether there is an Innovation or Continuous Improvement, Change control or Contract variation clause(s) that will allow you to capitalise on opportunities to take action on CO2e in the delivery of the contract e.g. transition to electric or hydrogen powered vehicles use of low carbon cement / concrete; lower carbon supply chain partners.

4.4. Maximise your organisation's influence over the market

- by entering into collaborative procurement arrangements with others in your region, sector or at an all Wales level to aggregate the demand to a level that incentivises prospective suppliers to commit to making the sorts of changes referred to above.

4.5 Addressing CO2e in the procurement cycle

By considering the issues and taking the actions set out in steps 1 to 7 below, you can ensure that the procurement builds in consideration of CO2e. Steps 2 to 5 is your opportunity to build in CO2e emission reductions as a differentiator in tender documentation and evaluations, allowing those suppliers, contractors or service providers that are most likely to help you to work towards decarbonisation to express their offering and score well. Having awarded the contract on this basis it is essential to ensure delivery of all the anticipated contract outcomes in the contract management phase's stages 6 to 8.



The procurement cycle:

1. Planning
2. Defining requirements
3. Tender preparation and advertising
4. Evaluation and selecting
5. Contract award / start up
6. Contract management
7. Contract termination and review lessons learned

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1. Planning

- Challenge the 'need'. Is the procurement needed at all? Are there other ways to achieve the desired outcomes?
- Use your and others experience to improve outcomes.
- Research / pre-market engagement – understand the market and new / emerging technologies, products or solutions.

2. Defining requirements

- Engage / influence 'decision makers' (budget holders / commissioners/ designers)
- Research / pre-market engagement – understand the market and new / emerging technologies, products or solutions.
- Understand strategic policy goals, targets, objectives, not just the need / wants of the contract.
- Consider how to incentivise /ensure continuous improvement.

3. Tender preparation and advertising

- Aim for a 'cultural fit' – winning bidder wants to work with you not just profit from the contract.
- Communicate strategic policy goals, targets, objectives, not just the need / wants of the contract.
- Ensure potential suppliers understand you will be seeking lower and preferably zero CO2e solutions / outcomes.

4. Evaluating tenders

- Ensure specifications and award criteria require lower and preferably zero CO2e solutions / outcomes.

5. Contract award / start-up

Confirm winning bidders understanding of:

- Desired contract outcomes.
- Any incentives for or requirements for continuous improvement / innovation during the contract lifetime.
- KPIs / management information (preferably activity / usage data that ensures CO2e emissions in the supply chain are monitored and managed down as far as possible.)

6. Contract management

- Ensure the desired contract outcomes are achieved.
- Encourage and incentivise continuous improvement / innovation.
- Gather KPI / management information preferably activity / usage data that ensures CO2e emissions in the supply chain are monitored and managed down as far as possible.

7. Contract end / lessons learned

- Use key management information (activity / usage data to inform and improve subsequent specifications).
- Understand 'end- user' experience what went well, what can be improved?

5. Timing

This WPPN is effective from the date of publication 01/12/2021 until it is superseded or cancelled.

6. Dissemination and scope

This WPPN is directly applicable to all Welsh public sector bodies and should be circulated (for information) within your organisation, particularly drawing it to the attention of all personnel with a commissioning, procurement planning or contract management role, as well as those responsible for actions to mitigate the impact of CO₂e Greenhouse Gas emissions contribution to Climate Change or responsible for reducing the carbon footprint of public sector bodies in Wales.

7. Legislation

This approach to procurement supports the decarbonisation of public sector activities and specifically the Wellbeing Goal of A more prosperous Wales: An innovative, productive and low carbon society which recognises the limits of the global environment and therefore uses resources efficiently and proportionately (including acting on climate change); and which develops a skilled and well-educated population in an economy which generates wealth and provides employment opportunities, allowing people to take advantage of the wealth generated through securing decent work.

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8. Welsh Government Procurement Policy Statement

This WPPN is duly aligned to the Wales Procurement Policy Statement.

Principle 6

We will act to prevent climate change by prioritising carbon reduction and zero emissions through more responsible and sustainable procurement to deliver our ambition for a net zero public sector Wales by 2030.

9. Contact details

Commercial Policy – Polisi Masnachol - CommercialPolicy@gov.wales
[/PolisiMasnachol@llyw.cymru](mailto:PolisiMasnachol@llyw.cymru)

10. Acknowledgements

Welsh Government acknowledges that it has drawn upon the following publications and organisations (links are provided where appropriate):

[Welsh Public Sector Net Zero Carbon Reporting Guide](#) (Welsh Government 2021)

[Wales Procurement Policy Statement](#) (Welsh Government 2021)

[WPPN 06/21: Decarbonisation through procurement - Taking account of](#)

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Carbon Reduction Plans (Welsh Government 2021)

The Public Contracts Regulations 2015 (SI 2015 / 102) (Crown Commercial Services Feb 2015)

Denbighshire County Council

Natural Resources Wales

Annex 1: Supply chain emission factors (kg/CO₂e per £ spent)

This is an image, for illustration purposes only of sheet 3 of 'net-zero-carbon-reporting calculator' (the calculator) that is available on the Gov.Wales page for this WPPN. The 'net-zero-carbon-reporting calculator' is based on Table 29 in the Welsh Public Sector Net Zero Carbon Reporting Guide. Sheet 3 Supply Chain Emissions for calculating the Indirect Emissions from the supply chain is for the calculation of your scope 3 purchased goods and services emissions.

Indirect emissions from the supply chain

This table is taken directly from the Defra source 'Table 13 - Indirect emissions from the supply chain'.

www.gov.uk/government/statistics/uks-carbon-footprint

This table only covers indirect emissions from the supply chain and is an estimate of the indirect GHG emissions resulting from expenditure on procuring goods and services. The emission factors were calculated by the Centre for Sustainability Accounting and were last updated for the year 2011. Currently there are no more recent factors available for expenditure by SIC code.

This table also includes a number of activities that are likely to be covered in your operational emissions, such as fuel use and transmission and distribution, travel and water. If you have captured that expenditure in the Operational emissions tab, you should remove the expenditure from this table as otherwise you will be double counting your emissions. However, the information in this table may still be useful for a rough initial calculation of the relative importance of these activities in the first instance.

Instructions for users:

- 1) Identify the amount spent on different product groups (in actual prices in £, including VAT).
- 2) Multiply the amount of spending by the conversion factor to get total emissions in kilograms of carbon dioxide equivalent (kg CO₂e). This excel spreadsheet does this automatically following your entry of the amount of spending into the appropriate box.

Table 13 Indirect emissions from the supply chain

| SIC code (SIC 2007) | Product category | Amount spent by product category (£) | Emission factor (kgCO ₂ e per £ spent) | Total kg CO ₂ e | RSD estimate (+/-%) | Notes on data source and exclusions |
|---------------------|--|--------------------------------------|---|----------------------------|---------------------|-------------------------------------|
| 01 | Agriculture products ² | | 3.10 | | | |
| 02 | Forestry products | | 0.75 | | | |
| 03 | Fish products ² | | 0.93 | | | |
| 05 | Coal, lignite, peat ³ | | 2.97 | | | |
| 06 & 07 | Crude petroleum and natural gas & Metal ores | | 0.66 | | | |

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