Making Sense of Scope 3 Tools and Toolkits

NZWW Team Overview

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Jeremy is an Emeritus Professor of Engineering Systems at UCL. Past roles have included Chief Scientist and Engineer at BRE, DLUHC (DCLG) Chief Scientific Adviser, BOC (Edwards) plc Technology Director, and Global Research Director at Arup.

Currently Jeremy is leading a team setting up the Net Zero What Works Centre and is Director and PI of the seven-year £24m PETRAS National Centre of Excellence.

Mark Miodownik
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Mark Miodownik is the UCL Professor of Materials & Society. He is a Director of the UCL Institute of Making, and set up the Plastic Waste Innovation Hub to carry our research into solving the environmental catastrophe of plastic waste dealing with topics such as biodegradable plastics and product reuse and repairability.

Mark is also a multi-award winning author, and regular BBC presenter on materials science and engineering.

Polina Pencheva
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Poli is an architect with over 10 years of experience. She has led the design and delivery of a number of large-scale projects in different sectors in London. Poli has expertise in use of data in design and procurement and sustainable design practices. Poli stepped away from her role as Associate at Morris+Company, to join the NetZero What Works Team aiming to boost cross-sector collaboration and coordination in addressing the complex systems challenges of NetZero.

Penny Clark
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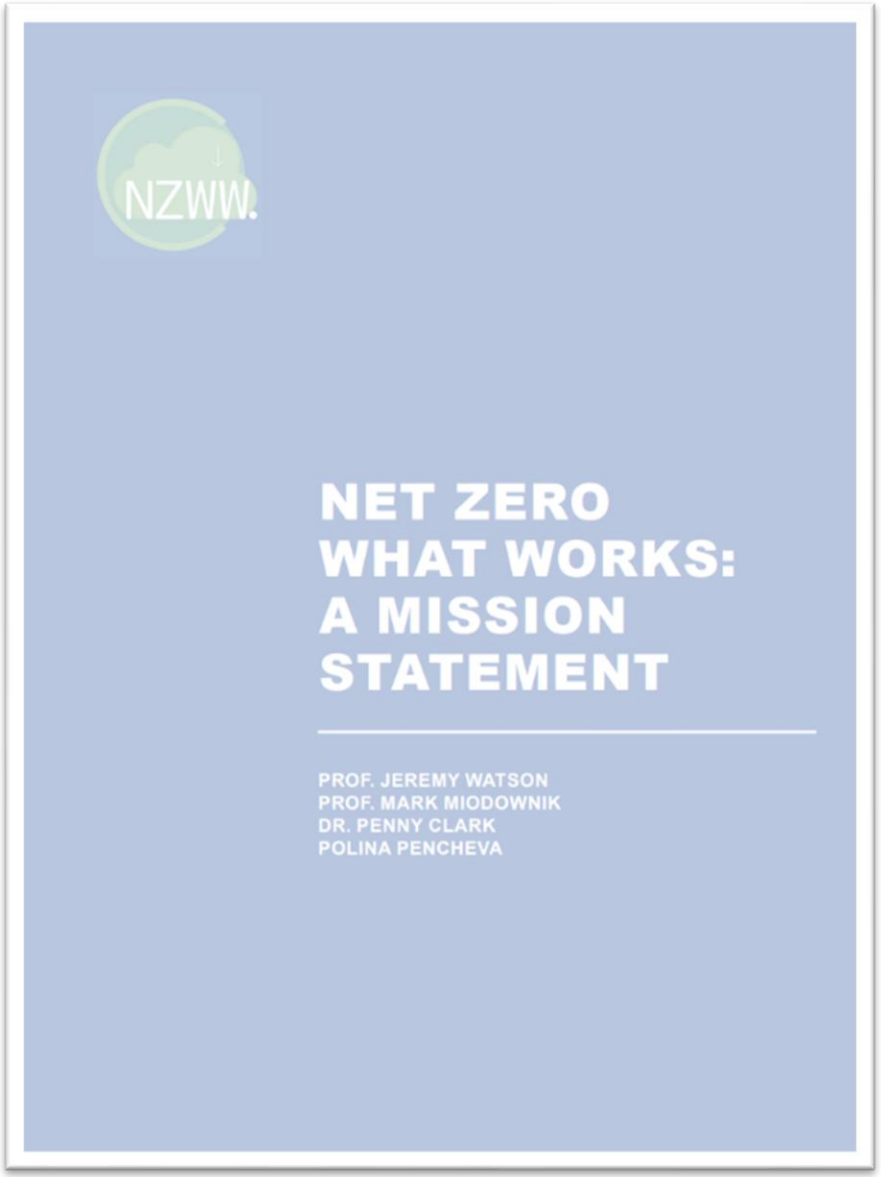
Penny is a social scientist with MSc in Social Research Methods and a specialism in shared housing and environmental post-occupancy evaluation. She completed her PhD at the University of Westminster on this topic, and since then has undertaken postdoctoral research roles at the University of Westminster and Birkbeck University, alongside being a Director of Conscious Coliving, a real estate consultancy with a focus on impact and sustainability.

Mission Statement

Accelerating just climate change action, through:

1. Evaluating and translating the often-siloed research from academia, government and industry, creating a **whole systems picture of 'what works'**;
2. Increasing **confidence, efficiency and cost-effectiveness** of net zero policy and practice;
3. **Bridging the gap between high-level strategic organisations and practitioners**, acting as a validation hub for advice and outputs from existing organisations;
4. Providing evidence that is **free from commercial remits or sectoral biases**;
5. Increasing the **demand for and supply of evidence of 'what works'** to accelerate effective net zero action.



Agenda

1. Where are you with Scope 3 emissions measurement?
2. Scope 3: covering some of the basics
3. Scope 3 Tools and Toolkits Analysis
   i. Purposes
   ii. Geographic scale
   iii. Type of measurements
4. Factors to consider when choosing Scope 3 tools and toolkits
5. Round-up, questions and discussion

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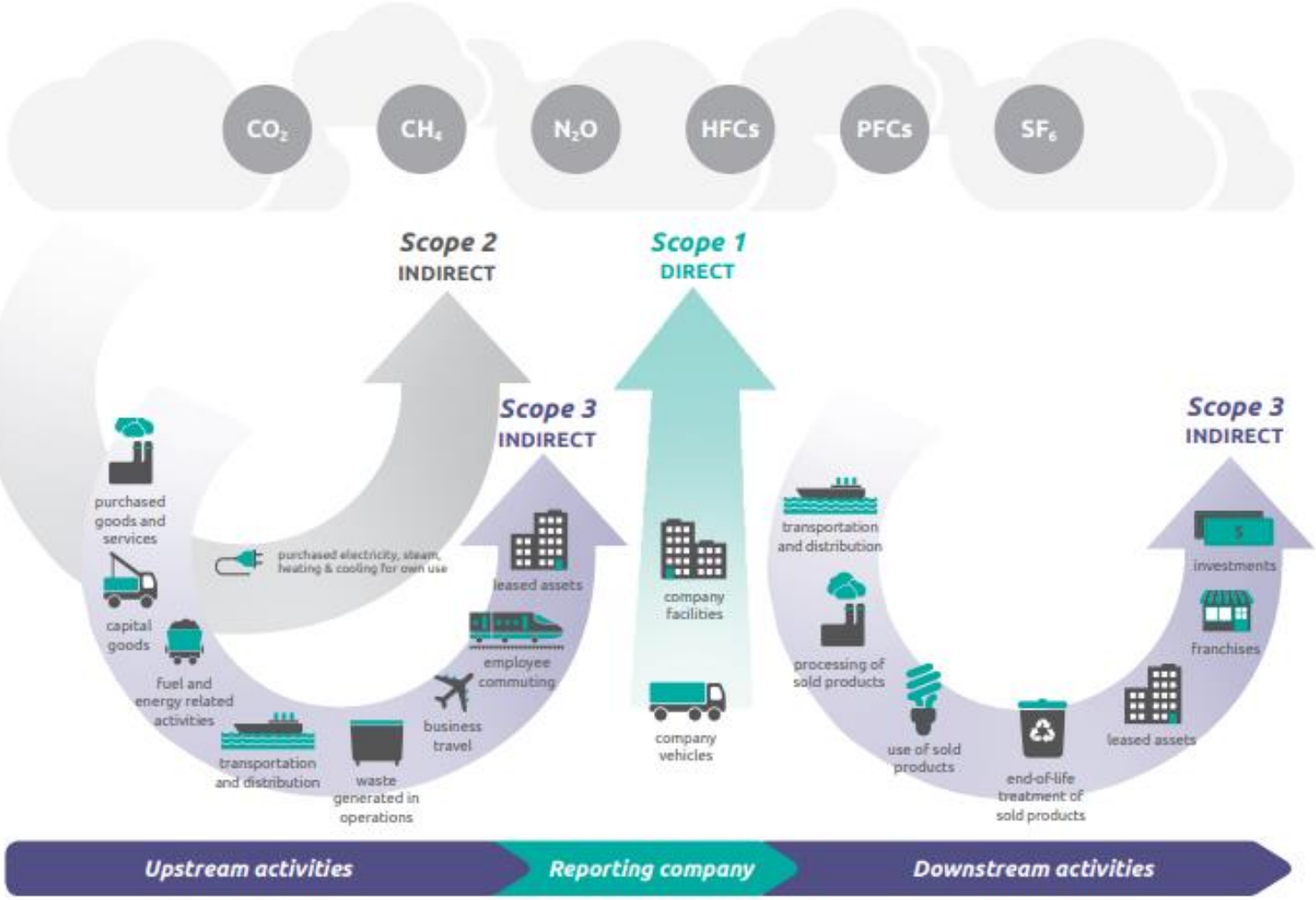
Where are you/your organisation at with measuring Scope 3... Menti.com

Scope 3 Emissions:
The Basics

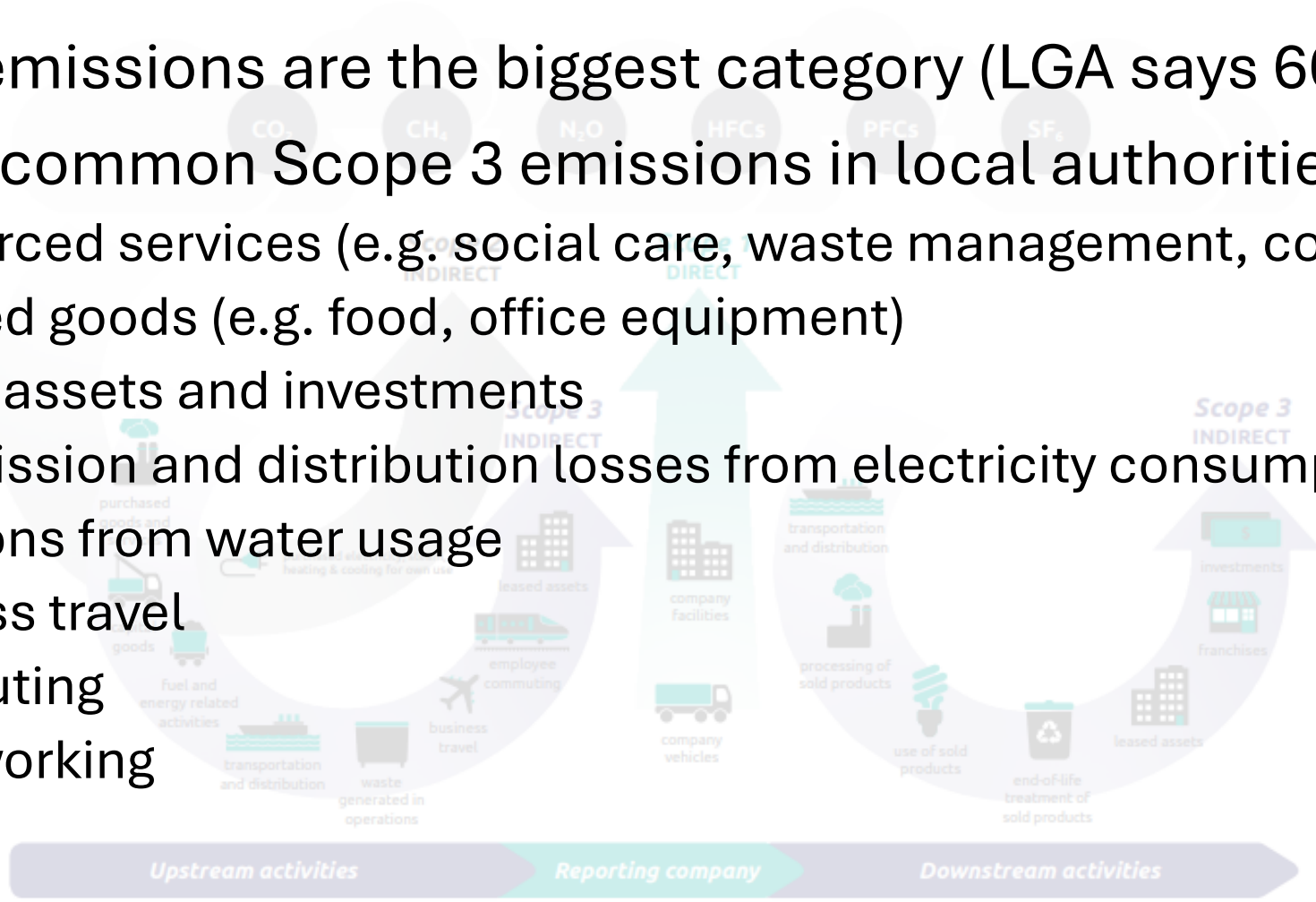
What Are Scope 3 Emissions?



Greenhouse Gas Protocol (2011). Corporate value chain (Scope 3) accounting and reporting standard. *World Resources Institute and World Business Council for Sustainable Development, Washington, DC*, Figure 1, p. 5

Scope 3 Emissions and Local Authorities

- Scope 3 emissions are the biggest category (LGA says 60-80%)
- What are common Scope 3 emissions in local authorities?
  - Outsourced services (e.g. social care, waste management, construction)
  - Procured goods (e.g. food, office equipment)
  - Leased assets and investments
  - Transmission and distribution losses from electricity consumption
  - Emissions from water usage
  - Business travel
  - Commuting
  - Homeworking



Local Government Association (no date) 'Climate change: reporting guidance for local authorities'. Available at: https://www.local.gov.uk/climate-change-reporting-guidance-local-authorities#scope-3-emissions-reporting-categories-

Deciding What to Measure?

1. Define your goals
2. Define your organisational boundary
3. Start “wide but shallow”. Map and screen your Scope 3 emissions, then prioritise for meaningful impact.

   Look at:
   - Size (of contract by spend or delivery outcome)
   - Influence
   - Risk
   - Stakeholders
   - Spending or revenue
   - Outsourcing
   - Sector guidance

Greenhouse Gas Protocol (2011). Corporate value chain (Scope 3) accounting and reporting standard. *World Resources Institute and World Business Council for Sustainable Development, Washington, DC.*

Local Government Association (no date) ‘Climate change: reporting guidance for local authorities’. Available at: https://www.local.gov.uk/climate-change-reporting-guidance-local-authorities#scope-3-emissions-reporting-categories-

Recommended Resources for Measuring Scope 3 Guidance

Resetting the relationship between local and national government. **Read our Local Government White Paper (https://www.local.gov.uk/local-government-white-paper)**

Local Government Association

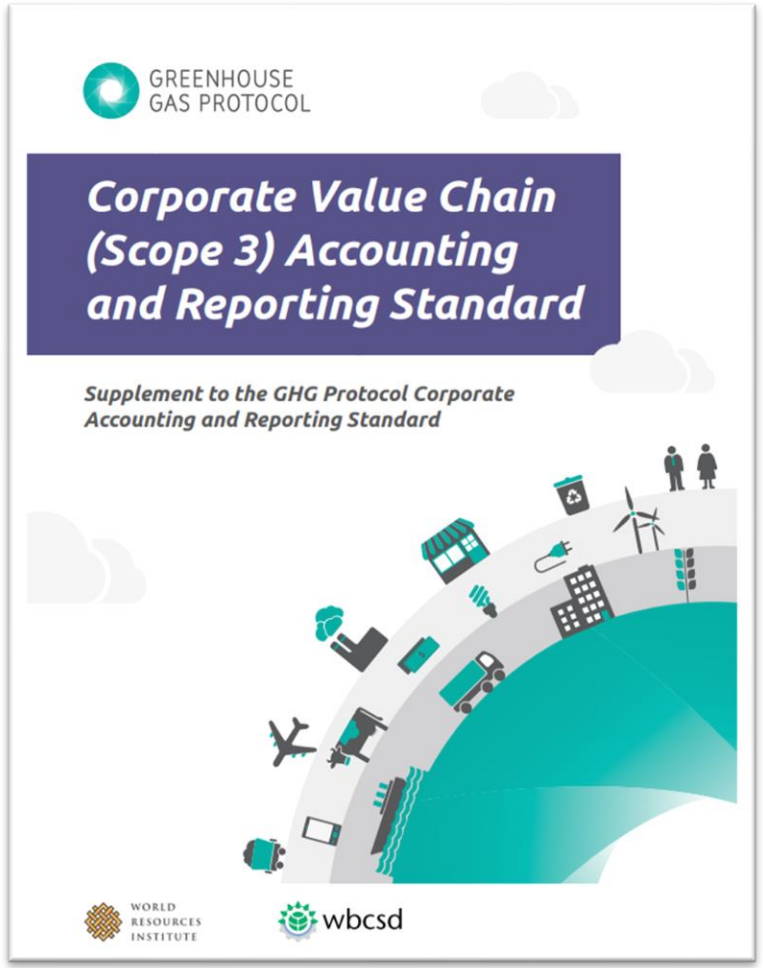
Guide: Climate change reporting guidance for local authorities

This guidance document supports the Greenhouse Gas Accounting Toolkit, which has reporting tabs for capturing Scope 3 emissions. It aims to assist local authorities with understanding the scale of reporting, what to report and how to set an action plan for future reporting.

Introduction

The 2024 LGA Climate Change Survey indicates that 92 per cent of local authorities are reporting on Scope 1 and 2 emissions for their own operations, with a further 67 per cent reporting on some Scope 3 for their own operations.

This guidance document supports the GHG accounting toolkit, which has reporting tabs for capturing Scope 3 emissions. It aims to assist local authorities with understanding the scale of reporting, what to report and how to set an action plan for future reporting. As the understanding and interpretation of the GHG protocol for Scope 3 reporting continues to develop, the GHG accounting toolkit and associated guidance will also be updated. In the summer of 2024 contract level Scope 3 reporting tabs will be added, which will enable councils to account for emissions across separate contracts.



GREENHOUSE GAS PROTOCOL

Corporate Value Chain (Scope 3) Accounting and Reporting Standard

Supplement to the GHG Protocol Corporate Accounting and Reporting Standard

WORLD RESOURCES INSTITUTE

wbcsd

Scope 3 Emissions:
Tools and Toolkits

“We all have a toolkit fatigue, and we don’t know which one will be adopted by all Local Authorities.”

Steven Wilding, Head of Net Zero Neighbourhoods and Green Economy, LB Hounslow

What we will cover on Scope 3 tools/toolkits

An overview of Scope 3 tools/toolkits analysis

+ guidance on your own analysis

You will gain access to i) a Scope 3 tools/toolkits analysis matrix, ii) guidance on what criteria to consider when choosing a tool or toolkit, and iii) a copy of these slides

Tools/Toolkits referenced in this presentation

Name of Tool/Toolkit	Description	Reference
Government conversion factors for company reporting of greenhouse gas emissions	Spreadsheet from UK Government with conversion factors	Gov
The Greenhouse Gas Accounting Tool	Spreadsheet designed for recording activity data to calculate council emissions	GGAT
Homeworking Emissions Whitepaper	Toolkit for measurement of homeworking emissions	Home
Impact: Community Carbon Calculator	Shows estimated greenhouse gas emissions at the parish, ward, and local authority level	IMPCT
Local Authority Consumption Accounts	Provides consumption-based emissions estimates for localities in the UK from 2001 onwards	LACA
Net0	A tool to measure, manage and report carbon emissions, in particular supply chain emissions	Net0
Place-based carbon calculator (legacy version)	Estimates the per capita carbon footprint for every Lower Super Output Area (LSOA) in England	PB-CC
SCATTER	An emissions measurement and modelling tool primarily for local authorities, aligned with CDP	SCTR
Waste Emissions Calculator	Spreadsheet designed for recording of waste-related activity data to calculate council's waste emissions	WSTE

Which Tools/Toolkits do you know about, and have you used? … Menti.com

Purposes of Tools and Toolkits

To inform the development of net zero strategies / policies


IMPCT


LACA


PB-CC


SCTR


Gov


GGAT


Net0

ecoact
Home


WSTE

In-house measurement of greenhouse gases for internal / external reporting


Gov


GGAT

ecoact
Home


Net0


WSTE

Insight into local area emissions through estimates


IMPCT


LACA


PB-CC


SCTR

Show how local areas compare nationally / with other areas


IMPCT


LACA


PB-CC

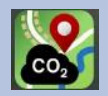

SCTR

Communications tool for raising insight and awareness


IMPCT


LACA


Net0


PB-CC


SCTR

Future scenario modelling


SCTR


WSTE

Why you want to measure Scope 3...
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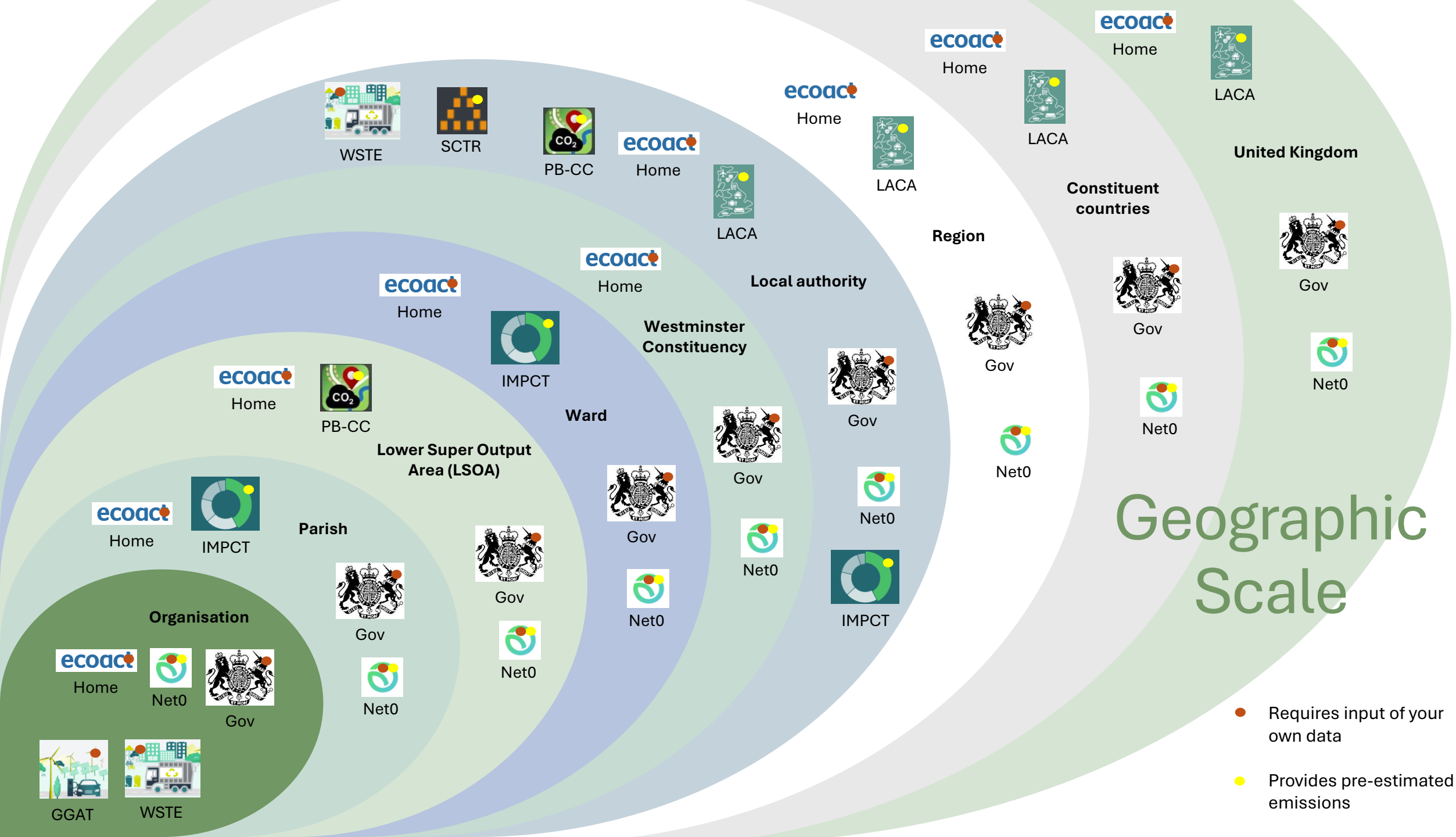

Organisation
Parish
Lower Super Output Area (LSOA)
Ward
Westminster Constituency
Local authority
Region
Constituent countries
United Kingdom
Home
Net0
Gov
LACA
IMPCT
PB-CC
SCTR
WSTE
GGAT
Geographic Scale
Requires input of your own data
Provides pre-estimated emissions

Scope 3 Measure-ments Covered by Tools / Toolkits

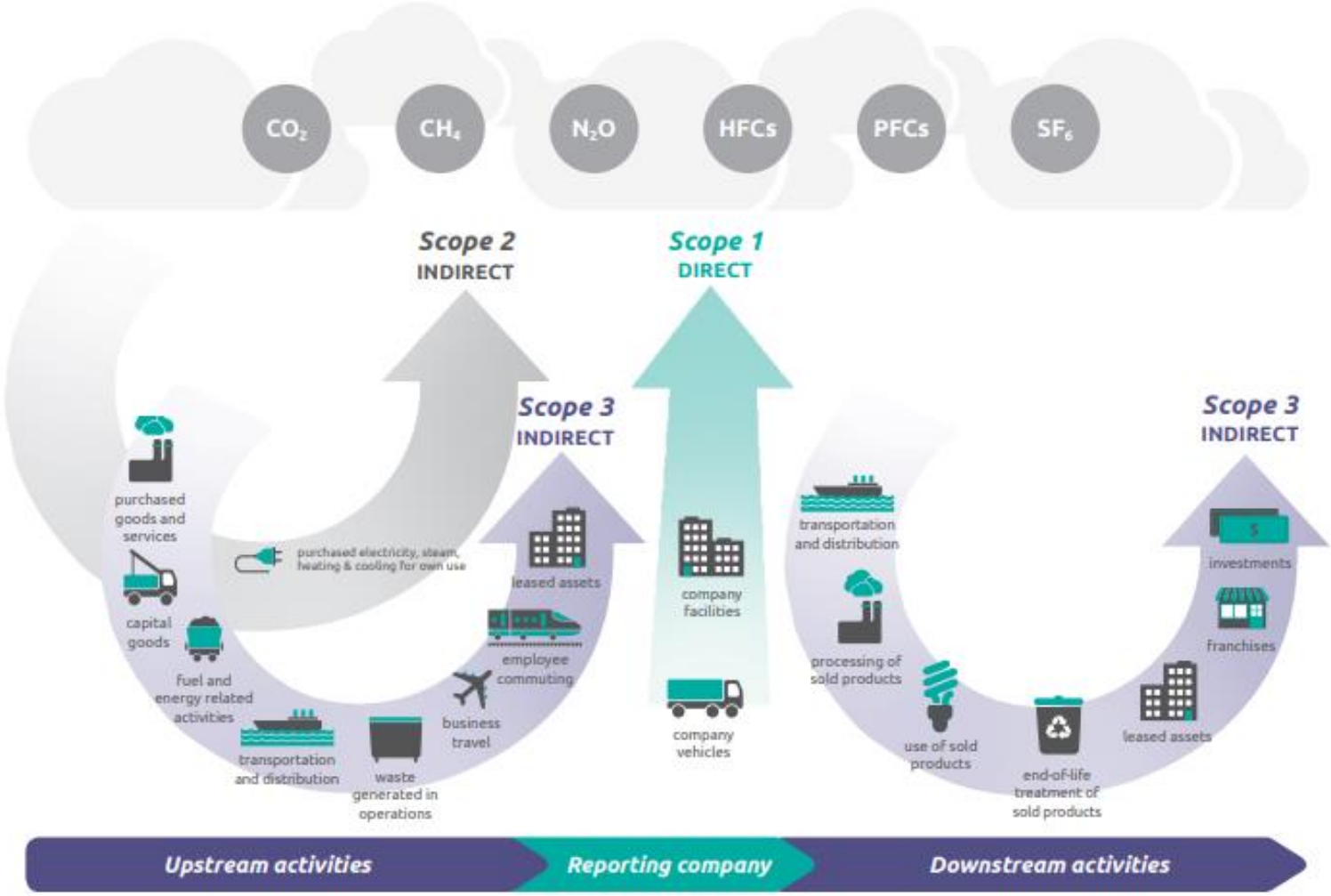
- Requires input of your own data
- Provides pre-estimated emissions

Category	Tools/toolkits
Commuting	Gov, GGAT, Net0
Drink	Gov, GGAT, Net0, LACA
Food	Gov, GGAT, Net0, LACA, IMPCT
Freighting goods	Gov, Net0
Goods	Net0, LACA, PB-CC, IMPCT
Government and capital investment	LACA
Material use	Gov, GGAT, Net0
Outsourced Scope 3 emissions	Gov, GGAT, Net0

Category	Tools/toolkits
Services	GGAT, Net0, LACA, PB-CC, IMPCT
Supply chain	Net0
Staff business travel	Gov, GGAT, Net0
T&D (transmission and distribution)	Gov, GGAT, Net0, SCTR
Waste	Gov, WSTE, GGAT, Net0, IMPCT, LACA
Water	Gov, GGAT, Net0, LACA
Working from home	Gov, GGAT, ecoact Home, Net0
WTT (well-to-tank)	Gov, Net0, SCTR

Why not work towards a consistent approach for measuring Scope 3 emissions?

Scope 3 Emissions categories from Greenhouse Gas Protocol



Greenhouse Gas Protocol (2011). Corporate value chain (Scope 3) accounting and reporting standard. *World Resources Institute and World Business Council for Sustainable Development, Washington, DC*, Figure 1, p. 5

Scope 3 emissions categorised into

Group 1: Scope 3 categories which are practical and feasible for local authorities to report on

Group 2: Scope 3 categories that require further collaboration and work to develop collection methodologies

Group 3: Scope 3 categories that are unlikely to apply to local authorities at this time, but require further research

Scottish Government (2024) 'Climate change delivery: improvement report'. Available at: https://www.gov.scot/publications/scottish-government-improvement-plan-response-environmental-standards-scotland-investigation-climate-change-delivery-improvement-report/pages/5/

Group 1: “Practical and Feasible”

3. Fuel- and energy related activities (not included in Scope 1 or Scope 2)

- T&D losses
- WTT emissions


Gov


GGAT


Net0


SCTR

5. Waste generated in operations

- Disposal and treatment of waste
- Optional: transport of waste


GGAT


IMPCT


Net0


Gov


WSTE


LACA

6. Business travel

- Transport
- Optional: accommodation


Gov


GGAT


Net0

7. Employee commuting and home-working

- Transport
- Working from home


Gov


GGAT

Home


Net0

Group 2: “Collaboration and Resource”

1. Purchased goods and services

All upstream emissions e.g.

- Social care
- Food


IMPCT


LACA

PB-CC


GGAT


Net0

2. Capital goods

All upstream emissions of purchased capital goods e.g.

- Raw construction materials
- Electronic goods


Net0


GGAT


Gov


LACA

8. Upstream leased assets

- Scope 1 and 2 operating emissions, e.g. energy
- Optional: construction /manufacture emissions


Gov


GGAT


Net0

13. Downstream leased assets

- Scope 1 and 2 operating emissions, e.g. energy
- Optional: construction /manufacture emissions


Gov


GGAT


Net0

15. Investments

- Calculating a share of emissions from investments (see GHG Protocol Scope 3 Calculation Guidance*)


Gov


GGAT


Net0

*Greenhouse Gas Protocol (2013). Technical Guidance for Calculating Scope 3 Emissions. *World Resources Institute and World Business Council for Sustainable Development, Washington, DC.*

Group 3: “Need Further Research”

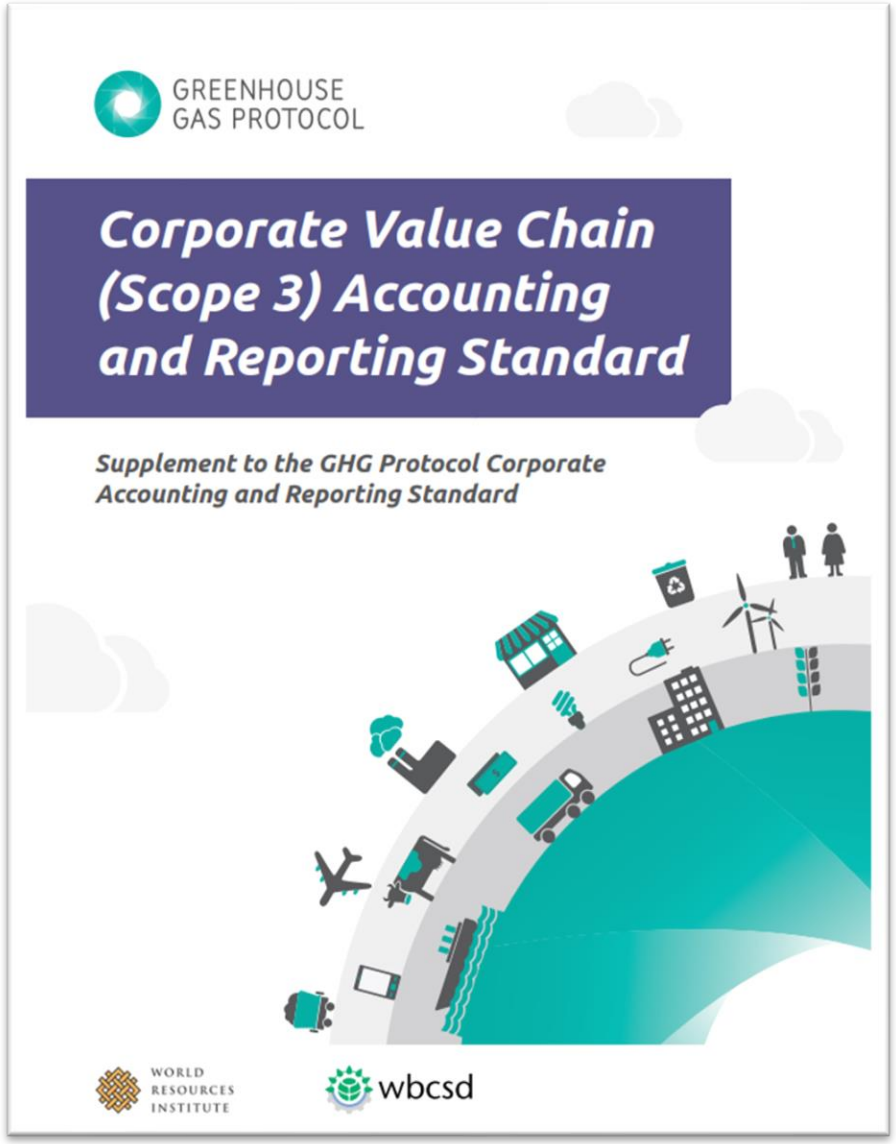
9. Downstream distribution and transportation
10. Processing of sold products
11. Use of sold products
12. End-of-life treatment of sold products
14. Franchises

Unlikely to be relevant to most local authorities

Emissions may be insignificant

Methodologies for data collection uncertain

For definitions of Scope 3 categories...



What Scope 3 categories you are measuring... Menti.com

Choosing
Tools and Toolkits

Choosing Tools / Toolkits - Purpose

Criteria	What to check	Interpreting and understanding what's important
1. Purpose *What is the purpose(s) of the tool or toolkit (vs. your purpose)?*	The stated or implicit purpose(s) of the tool or toolkit (vs. what you are hoping to achieve)	Questions which can help you to identify your purpose(s), include: • What are the primary goals we would like to achieve? • Who are our main stakeholders, and what are their needs/objectives? • How will we measure success for this project?

Choosing Tools / Toolkits - Developer

Criteria	What to check	Interpreting and understanding what's important
2. Developer *Who developed the tool or toolkit?*	Name of the organisation and person or team if applicable	• Doesn't inherently determine its quality, but can offer clues

Choosing Tools / Toolkits – Up to date

Criteria	What to check	Interpreting and understanding what's important
3. Up to date *How up to date is this tool / toolkit?*	i) When the tool/toolkit was last updated ii) What was updated iii) Whether the tool/toolkit is updated regularly	i) Recent updates more favourable for accuracy ii) Consider what has been updated iii) How often (and how long for) will the tool/toolkit be updated?

Choosing Tools / Toolkits – Geographic scope

Criteria	What to check	Interpreting and understanding what's important
4. Geographic scope *What geographic regions does the tool/ toolkit cover?*	Whether the tool or toolkit specifies geographic regions covered, e.g. England, Wales, UK, etc., and which geographic regions are covered	• Aim to use tools/toolkits which are designed for, or can be, tailored to your geographic region • Consider that a sector-specific tool/toolkit may be more appropriate

Choosing Tools / Toolkits – Scale

Criteria	What to check	Interpreting and understanding what's important
5. Scale *What scale does this tool/toolkit measure at?*	Whether the tool or toolkit is designed to measure at a per person, household, organisation, parish, city, local authority, or other level	• Consider that a tool/toolkit often operates at two levels of scale e.g. household emissions within an LSOA • What do you intend to do with the results? • Are there other measurements already happening which it makes sense to align with?

Choosing Tools / Toolkits – Data transparency

Criteria	What to check	Interpreting and understanding what's important
6. Data transparency *Are data sources and assumptions shown?*	i) Whether data sources for emissions conversion factors specified and fully referenced ii) Whether assumptions and limitations of the sources and multipliers used are specified	• Enables you to assess quality • Enables greater accountability to other parties

Choosing Tools / Toolkits – Data reliability

Criteria	What to check	Interpreting and understanding what's important
7. Data reliability *Is the data used dependable?*	To what degree is the data used in the tool/toolkit underpinned by dependable data collection and verification procedures	• Source of the data should be specified • For emissions multipliers, the main reputable source for the UK is DESNZ's 'Government emissions conversion factors for company reporting of greenhouse gas emissions' • How have emissions factors been developed? Usually based on aggregate of empirical data or reasonable assumptions • Typical to take a 'risk-based' approach

Choosing Tools / Toolkits – Calculation Method

Criteria	What to check	Interpreting and understanding what's important
8. Calculation method *How appropriate is the calculation method used?*	Whether the tool or toolkit offers: • Spend-based analysis • Life-cycle analysis (LCA) including: cradle-to-gate, cradle-to-grave • Type of gases e.g. CO2, CO2e, CH4 • Activity-based measurement e.g. multiplying emissions factors by weight, distance, litres etc.	• Level of accuracy, given your purpose • Information you will need to make use of the tool/toolkit

Choosing Tools / Toolkits – Outputs

Criteria	What to check	Interpreting and understanding what's important
9. Outputs *What type of outputs does the tool/ toolkit produce?*	What the format of outputs is (e.g. table, graph), and how information is broken down	• Who/what is this for? Given this, what outputs are appropriate? • Can they be adapted into the right format?

Choosing Tools / Toolkits – Alignment

Criteria	What to check	Interpreting and understanding what's important
10. Alignment *Is there alignment with other tools, toolkits, accreditations and frameworks?*	• Specific alignment with another tool, toolkit, accreditation or framework • Alignment of data sets being used • How emissions are being calculated • The scale at which outputs are given, e.g. per person / per household	• What other tools, toolkits, accreditations and frameworks (TTAF) is your local authority currently using or planning to use? Does what can be measured with this tool/toolkit fit into your overarching goals? • Think of how you can enable comparing like with like • How the outputs from this tool/toolkit fit with outputs from other TTAF being used? • How does this tool/toolkit align with TTAF that other local authorities / organisations are using, enabling comparisons

Choosing Tools / Toolkits – Integration

Criteria	What to check	Interpreting and understanding what's important
11. Integration *How can the tool/toolkit be integrated into existing tools/software?*	Whether the tool/toolkit is accessible to other staff. What other software it integrates with, and whether it offers bespoke integrations.	• Consider who needs to use it, and what for. • Also consider how well the tool/toolkit will integrate with the current software that you are using

Choosing Tools / Toolkits – Support and Training

Criteria	What to check	Interpreting and understanding what's important
12. Support and Training *What support is available for using the tool/ toolkit?*	Whether the tool/toolkit has customer support and training resources, such as online guidance or training courses	Customer support can increase the likelihood that tools/toolkits are used (correctly). Think about who in your organisation would be using or inputting into the tool, and consider what type of support they would benefit from.

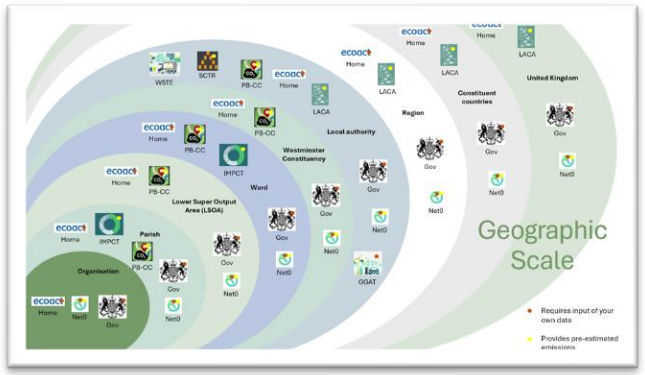
Choosing Tools / Toolkits – Cost

Criteria	What to check	Interpreting and understanding what's important
13. Cost *What is the cost of the tool/toolkit*	This includes running costs, along with potential set-up and training costs.	• Many tools/toolkits are free. • Would purchasing the tool/toolkit entail going through the procurement process?

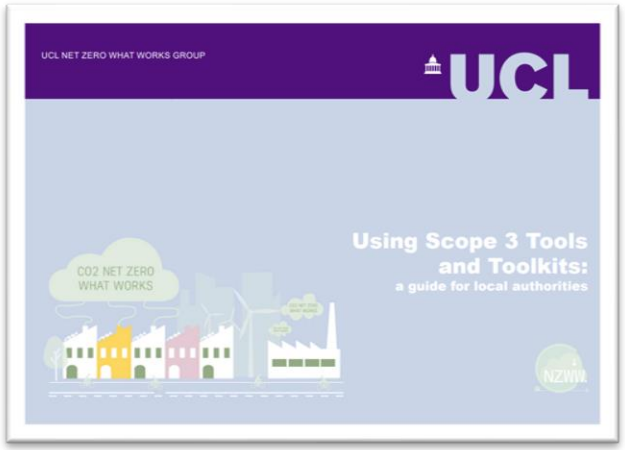
Choosing Tools / Toolkits – Used by

Criteria	What to check	Interpreting and understanding what's important
14. Used by *Which other organisations are using the tool/toolkit*	What other types of oragnisation are using the tool/toolkit. If possible, see which other local authorities are using it.	• Types of organisations using indicates who tool/toolkit is designed for • May allow you to compare results, or ask for advice • Ways to find out: case studies, ask around, ask developer

Resources For You



Today's slides



Choosing Scope 3 Tools and Toolkits Guidance

Scope 3 Tools and Toolkits matrix

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Questions / discussion