Carbon Footprint - Inverness

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Inverness Carbon Footprint

- UHI leading on a comprehensive measure of Inverness and immediate area carbon emissions – baseline yr 2014
- Pioneering methodology and approach – international protocols informing city and regional foot-printing activity across the world
- Wider than just Inverness city, also including the surrounding area.

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What is a Carbon Footprint

- A carbon footprint is measured in tonnes of carbon dioxide equivalent (tCO2e). The carbon dioxide equivalent (CO2e) allows the different greenhouse gases to be compared on a like-for-like basis relative to one unit of CO2.

- A carbon footprint considers all six of the Kyoto Protocol greenhouse gases: Carbon dioxide (CO2), Methane (CH4), Nitrous oxide (N2O), Hydrofluorocarbons (HFCs), Perfluorocarbons (PFCs) and Sulphur hexafluoride (SF6).

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Why the Interest?

- Climate change
- Finite fossil fuels
- Urban areas
    - currently generate around 80% of global economic output
    - around 70% of global energy-related GHG emissions
    - by 2030 will house 60% of the worlds population
- Will create a hothouse of innovation and business opportunities – currently supported with £ms of EU and domestic Government funding

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Emission Scopes

Scope Definition	Definition
Scope 1	GHG emissions from sources located within the Inventory boundary *(territorial)*
Scope 2	GHG emissions occurring as a consequence of the use of grid-supplied electricity, heat, steam and/or cooling within the Inventory boundary
Scope 3	All other GHG emissions that occur outside the Inventory boundary as a result of activities taking place within the area

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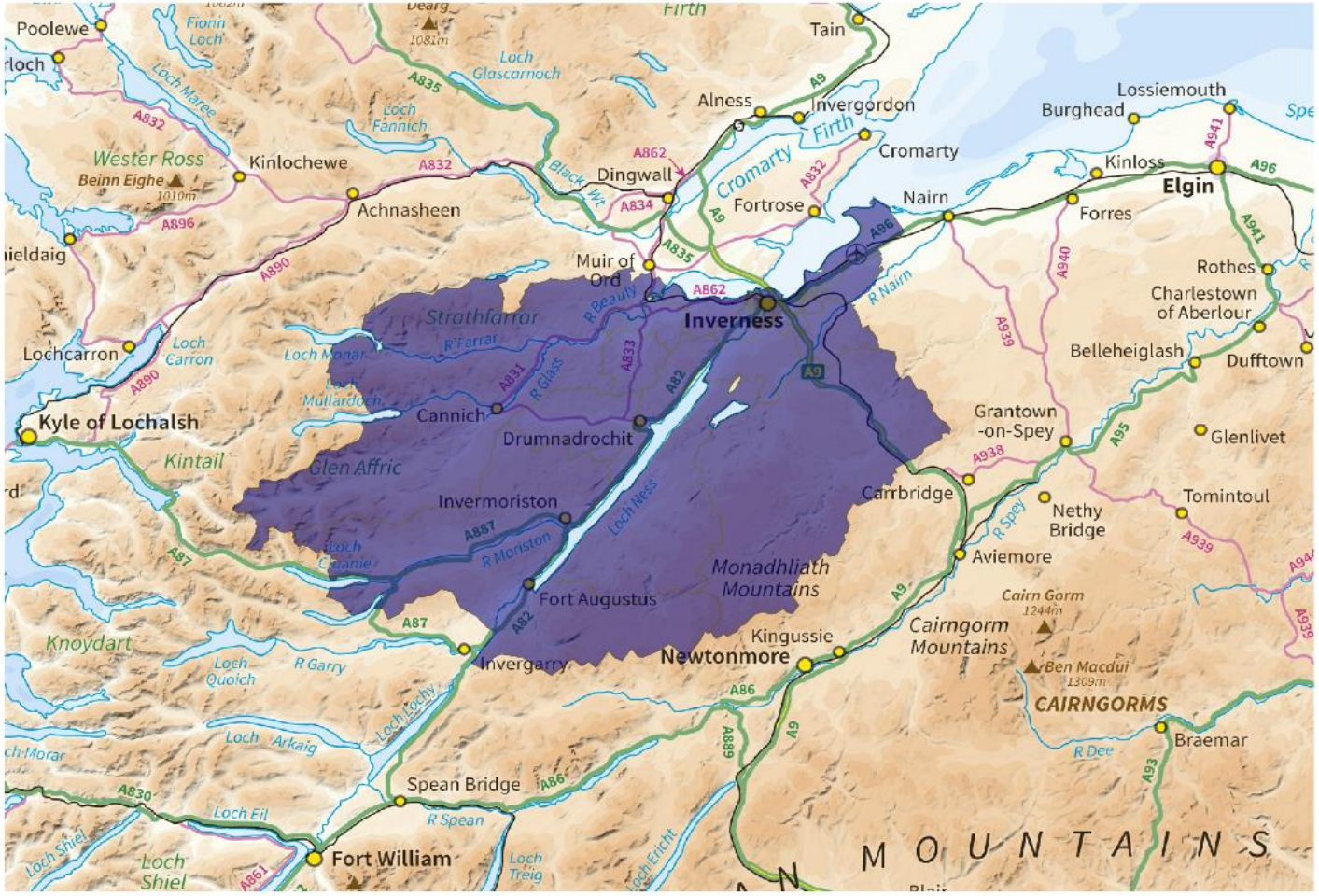
Inverness Inventory Boundary



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Carbon Footprint Sectors

- **Stationary** - residential, commercial and institutional buildings, manufacturing industries and construction, energy industries, fugitive emissions from mining & oil/natural gas systems.
- **Transportation** – on-road and off road, railways, waterborne navigation and aviation.
- **Waste** – solid waste disposal, biological treatment of waste, incineration and open burning, wastewater treatment and discharge.
- **Industrial Processes and Product Use** - mineral, chemical, metal and electronics industries, solvents in paints and propellants and hydro fluorocarbons in refrigeration.
- **Agriculture, Forestry and Other Land Use** – emissions from livestock, crops and soils and land use/land use change

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