

**GALLANT** stands for Glasgow as a Living Lab Accelerating Novel Transformation. It is a collaborative project between the University of Glasgow and Glasgow City Council. The primary objective of GALLANT is to design and test experimental ways for the city to adapt to the challenges of climate change. The project recognises the importance of systems thinking and partnerships, including with local communities, and the role of data in driving city-wide transformation. To achieve its goals, GALLANT has been divided into **five key areas. These areas are:**



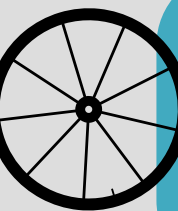
**Flood Risk** – Climate change is increasing extreme weather events (think more rain!), whilst also causing tidal change and sea level rise. These changes impact Glasgow, so the GALLANT project is exploring ways to change how we use the land along our rivers to combat this.



**Biodiversity Loss** – Having a wide range and a large number of different plants and animals is essential in the face of climate change, yet global biodiversity loss continues. Trees and other vegetation can help protect us from flooding, and help circulate carbon dioxide (CO<sub>2</sub>), reducing pollution. In cities such as Glasgow, increasing biodiversity can also have many health and social benefits. For these reasons, our researchers are mapping existing biodiversity levels across the city, and exploring ways to increase it.



**Vacant and Derelict Land** – Have you ever walked past a bit of land that looked completely abandoned? Ever wondered who owned it, why it was left like that, and imagined what it could be? Our Vacant and Derelict Land team is exploring technology that utilises these spaces to reduce CO<sub>2</sub> emissions and looking at how these can be returned to communities, giving them the power to repurpose the space based on their wants and needs.



**Active Travel and Inclusive Mobility** – CO<sub>2</sub> emissions are one of the main contributors to climate change, and in the UK, transport is the largest CO<sub>2</sub> emitter. We need to take steps to reduce our CO<sub>2</sub> usage. One way to do this is to reduce our reliance on cars. Active travel explores different ways to trade out the car, opting instead for cycling, wheeling and walking. Of course, doing this has additional health and well-being benefits, like reduced air pollution and increased physical activity.



**Sustainable Energy** – Many homes are feeling the impact of gas and oil price rises on energy bills. Our reliance on this as our primary source of heat and electricity isn't just bad for our bank balance but also for our planet. Researchers in the Sustainable Energy team are looking to develop sustainable, low-carbon energy solutions at a community level. That means communities produce and own their energy, reducing reliance on big oil and gas corporations.

We recognise that all of the above can only happen by involving as many people as possible. We believe that lots of the answers the scientists are looking for are already out there. By working with communities, we can explore challenges and solutions together and move towards a more sustainable Glasgow.