

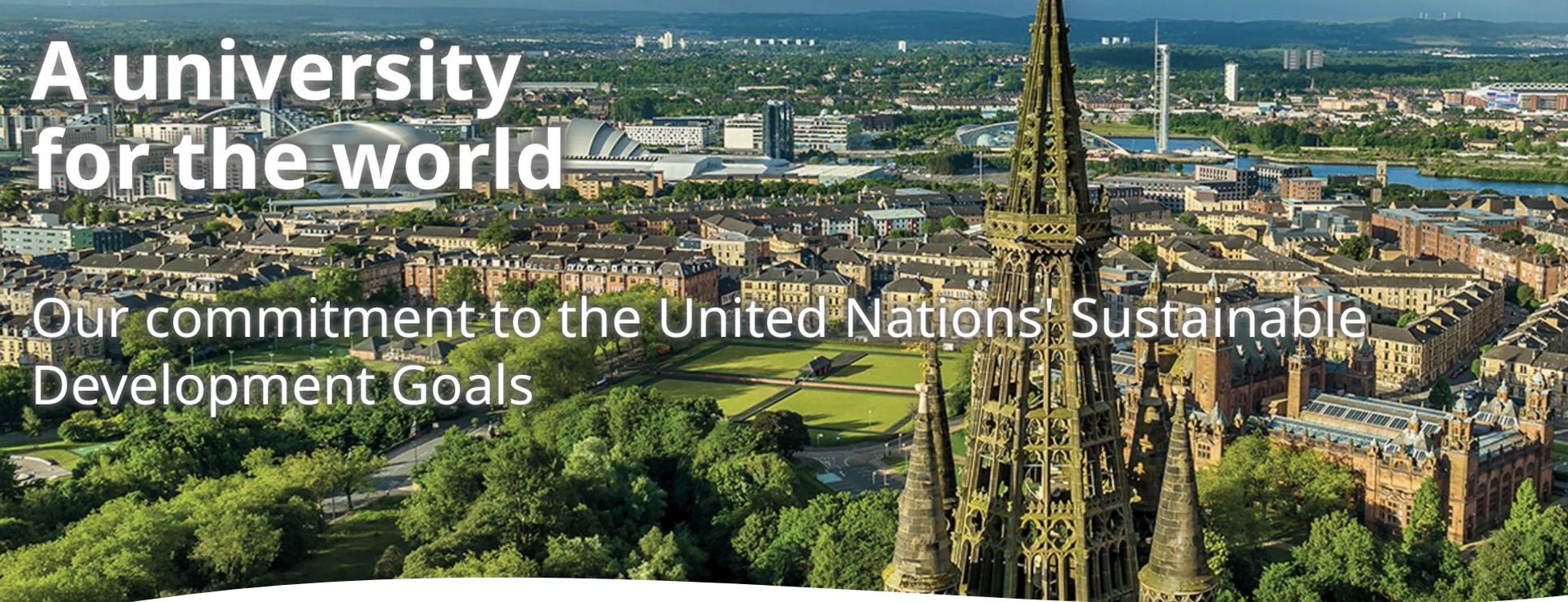
Governing for Net Zero: Sustainability at the University of Glasgow

Professor Kostas Kontis FREng HonFRAeS FAIAA
Mechan Chair of Engineering, Dean for Global Engagement
University of Glasgow

2026 NTNU × Glasgow × Kyushu Winter Institute

Overview

- Why sustainability governance matters
- Glasgow's sustainability profile and external benchmarks
- Climate strategy and net-zero commitments
- Governance architecture and decision-making
- Policy instruments and delivery mechanisms
- Achievements and partnerships
- Governance challenges and tensions
- Lessons for “governing for net zero”



A university for the world

Our commitment to the United Nations' Sustainable
Development Goals

Why Sustainability Governance Matters

- Universities are large emitters: estates, labs, travel, procurement
- They shape public policy, technology and professional practice
- Net-zero targets require coherent decisions, not isolated initiatives
- Governance links ambition, resources, accountability and reporting
- The University of Glasgow as a useful case study:
 - Ambitious targets and strong rankings
 - Formal structures from Court to working groups



University of Glasgow RANKED 12th

University of Glasgow: Sustainability Profile

- High performance in sustainability-focused rankings
- Strong positions in SDG-related impact and social sustainability
- Recognised for:
 - Climate action
 - Responsible consumption and production
 - Partnerships for the goals
- Signals a whole-institution approach, not just green “extras”

Early Leadership and Commitments

- Early and public commitments to sustainability and climate action
- Fossil-fuel divestment policy (first in key national/regional contexts)
- Adoption of the UN Sustainable Development Goals framework
- Increasing expectations from students, staff, funders and civic partners
- These commitments laid the groundwork for later governance reforms

Our climate commitments

- 2014: the first UK university to declare it would divest from fossil fuels within a decade
- 2017: signed the Sustainable Development Goals Accord
- 2019: first University in Scotland to declare a climate emergency
- 2020: opened the Centre for Sustainable Solutions
- 2020: published our response to the Climate Emergency 'Glasgow Green'
- 2021: launched new plan to cut carbon emissions from business travel by 7.5% each year

Declaring a Climate Emergency

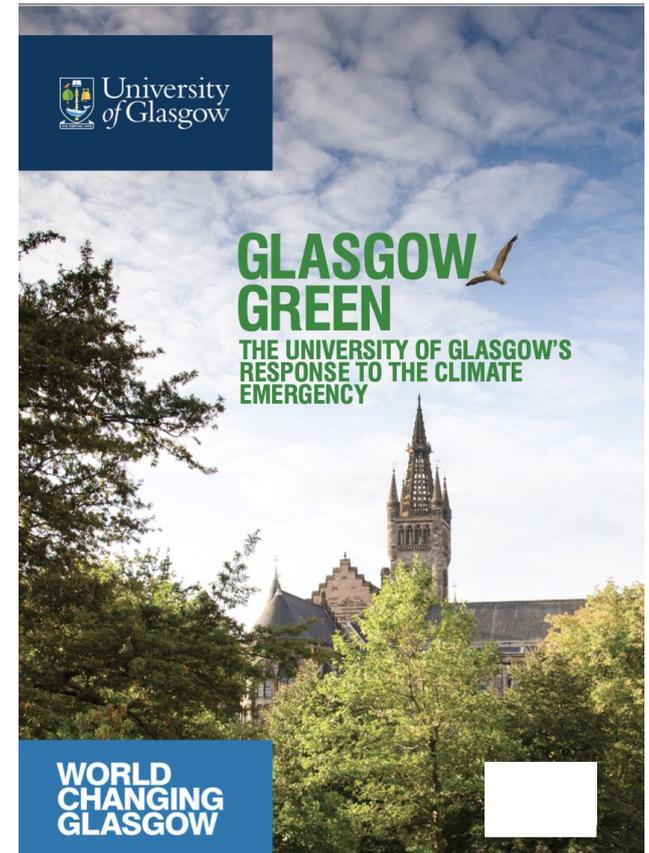
- 2019 Climate Emergency Declaration
- First university in Scotland to declare a climate emergency
- Explicit recognition of the climate crisis as a strategic risk
- Commitment to develop a focused climate strategy and action plan
- Mandate to integrate climate considerations into:
 - Strategy
 - Capital planning
 - Risk management
 - Policy review and development

GLASGOW GREEN: THE UNIVERSITY OF GLASGOW'S RESPONSE TO THE CLIMATE EMERGENCY



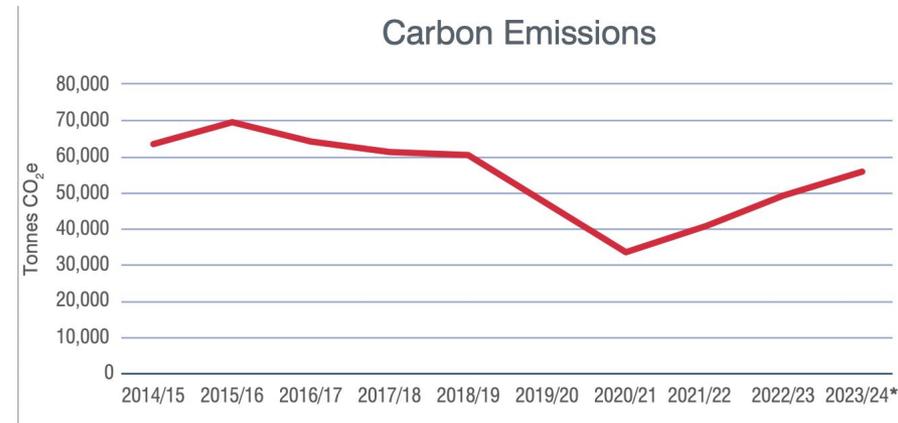
“Glasgow Green” Climate Strategy

- Glasgow Green: The response to the climate emergency
- University-wide climate change strategy and action plan
- Core commitment: net-zero greenhouse gas emissions by 2030
- Developed via extensive staff and student consultation
- Five main pillars:
 - Engaging and empowering our community
 - Promoting efficiency
 - Governance and policy
 - Continuous improvement initiatives
 - Building resilience through partnerships



Net-Zero Pathway and Carbon Management Plan

- From ambition to pathway
- Carbon Management Plan aligns with the 2030 net-zero target
- Baseline emissions established across scopes 1–3
- Interim and 2030/31 footprint targets defined
- Use of external modelling to compare:
 - Business-as-usual vs intervention scenarios
- Plan combines:
 - Deep emission reductions
 - Phased, high-integrity offsetting where necessary





- Who governs sustainability at Glasgow?
- Ultimate authority: University Court
- Court sub-committee: Estates & Sustainability Committee (ESC)
- Central strategy-level body:
 - Sustainability Strategy & Delivery Board (SSDB)
- Cross-institutional operational group:
 - Sustainability Working Group / Carbon governance
- Delivery-focused body:
 - Estates Sustainability Programme Board (ESPB)
- Enabling centre:
 - Centre for Sustainable Solutions (CfSS)

Governance Architecture: Overview

University Court and the ESC

- Court and Estates & Sustainability Committee
- Court: approves strategy, scrutinises progress, owns risk
- ESC: Court sub-committee with:
 - Oversight of Glasgow Green and sustainability strategy
 - Oversight of Estates Strategy and campus development
 - Responsibility for sustainability and estates risk registers
 - Review and recommendation of major capital investments
- Provides the key governance link between high-level commitments and estates/infrastructure decisions

Sustainability Strategy & Delivery Board (SSDB)

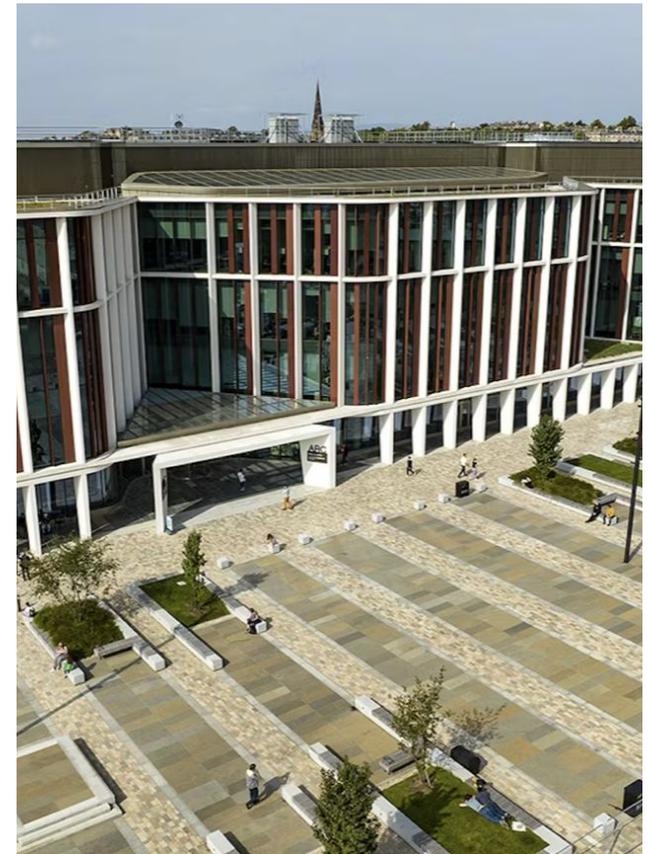
- Strategic oversight and integration
- Appointed by Senior Management Group (SMG)
- Mandate: development and delivery of sustainability strategy
- Core roles:
 - Shape and recommend sustainability policies
 - Approve the Glasgow Green delivery plan and timeline
 - Align sustainability with the University Strategy and other pillars
 - Coordinate engagement and communications across the institution
 - Report regularly to SMG and Court (via ESC)

Sustainability Working Group / Carbon Governance

- From strategy to implementation
- Sustainability Working Group supports implementation of:
 - Climate Change Strategy
 - Carbon Management Plan
- Typical membership:
 - Senior management (e.g. Chief Operating Officer)
 - College and University Services sustainability champions
 - Estates and Procurement
 - Student representatives
 - Sustainability and communications officers
- Functions:
 - Translate strategy into actions across colleges and services
 - Monitor progress and recommend adjustments
 - Raise awareness and build capacity among staff and students

Estates Sustainability Programme Board (ESPB)

- Delivering Glasgow Green on the ground
- Chaired by Executive Director of Estates
- Focus: establish and oversee the delivery programme for Glasgow Green
- Responsibilities:
 - Build a portfolio of decarbonisation programmes and projects
 - Use tools such as “cost per tonne of carbon (lifetime)” to prioritise
 - Recommend projects for capital approval
 - Ensure alignment between net-zero pathway and the capital plan
- Monitors programme-level risks and resource requirements



Centre for Sustainable Solutions (CfSS)

- Connecting governance, research and education
- Established as a cross-university centre to support the climate emergency response
- Acts as a connector between:
 - Governance structures and policy
 - Research and knowledge exchange
 - Teaching and curriculum development
 - Estates and operations
- Activities include:
 - Supporting sustainability courses and MOOCs
 - Facilitating communities of practice (e.g. teaching, labs)
 - Leading major city–university projects (e.g. GALLANT)

CENTRE FOR SUSTAINABLE SOLUTIONS



Sustainability: meeting the social foundations of current and future generations while living responsibly within a healthy, natural environment.

Policy Instruments and Management Systems

- Beyond committees: the toolkit
- Sustainability Strategy and associated action plans
- Carbon Management Plan with defined baselines and targets
- Thematic policies and frameworks, including:
 - Energy and carbon
 - Waste and circular economy
 - Biodiversity and green space
 - Sustainable food and catering
- Integration of sustainability into:
 - Risk management
 - Strategic planning
 - Annual performance reporting



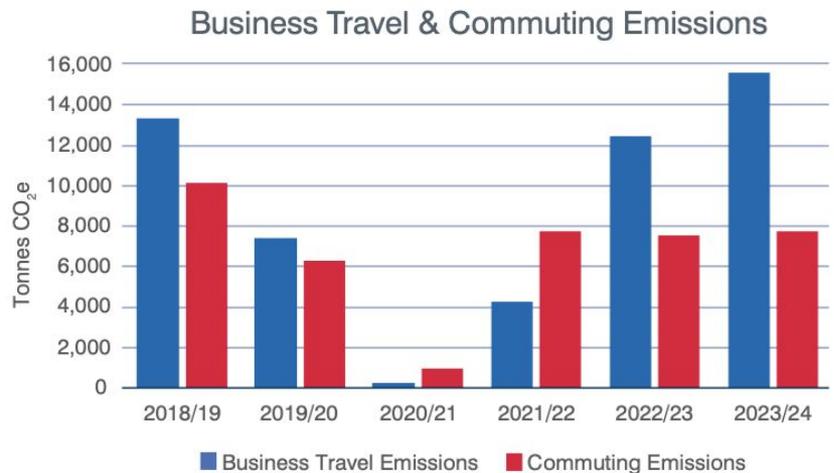
Sustainable Procurement and Supply Chains

- Procurement as a governance lever
- Sustainable procurement embedded in procurement strategy
- Whole-life and whole-value approach:
 - Economic
 - Social
 - Environmental dimensions
- Membership in external monitoring bodies for ethical supply chains
- Head of Procurement represented in sustainability governance structures
- Ensures that purchasing decisions align with net-zero and SDG commitments

Business Travel, Commuting and Behaviour Change

- Tackling Scope 3 emissions
- Guidance and principles for sustainable business travel:
 - Reduce unnecessary journeys
 - Shift to lower-carbon modes where possible
- Monitoring tools (e.g. dashboards) to track emissions from travel
- Integration of travel emissions into carbon reporting
- Ongoing challenge:
 - Emissions rebounding post-COVID
 - Need for cultural change and incentives
 - Balancing international engagement with climate commitments

BUSINESS TRAVEL AND COMMUTING EMISSIONS



Estates, Construction and Campus Development

- Aligning estate growth with net-zero
- Major campus redevelopment programme with explicit sustainability standards
- Design principles:
 - High environmental performance (e.g. energy efficiency)
 - Active travel and low-carbon transport options
 - Biodiversity enhancement and green infrastructure
- Governance:
 - Estates & Sustainability Committee oversight
 - Design standards embedded into project approval and delivery
- Tension: growing estate vs. required emissions reductions

Track Record and Headline Achievements

- Glasgow's sustainability story so far
- Early and complete fossil-fuel divestment commitment
- Climate emergency declaration and 2030 net-zero target
- Establishment of Glasgow Green and Carbon Management Plan
- Creation of the Centre for Sustainable Solutions
- Strong results in sustainability and SDG-focused global rankings
- Recognised as a sector leader in responsible climate action and governance

Labs, Students and Staff Engagement

- Sustainability in everyday university life
- Laboratory programmes (e.g. LEAF / S-Labs) reducing:
 - Energy use
 - Water consumption
 - Waste generation
- Green Impact and student-led initiatives
- Internships and projects through student sustainability programmes
- Training, toolkits and communities of practice for staff
- Demonstrates that governance decisions translate into local action



City and Regional Partnerships

- The university as an anchor institution
- Collaboration with city and regional partners on:
 - Climate resilience
 - Sustainable transport
 - Nature-based solutions and offset projects
- Large-scale city–university initiatives (e.g. living-lab approaches)
- Contribution to regional just transition and climate adaptation
- Reinforces the civic role of the University in sustainability governance

Governance Challenges: Ambition vs Capacity

- Where the governance system is tested
- Delivering net zero by 2030 in a growing, research-intensive university
- Resource and capacity constraints in estates and sustainability teams
- Complexity of coordinating across colleges, services and external partners
- Internal audits and risk assessments highlighting gaps in:
 - Operational planning
 - Data and monitoring
 - Prioritisation mechanisms
- Necessity of continuous improvement in governance structures

Sustainability

We do not achieve our sustainability strategic goals or meet the expectations of our students, staff and local community to tackle climate change

- Prioritisation of investment in the maintenance of our estate to projects that will directly contribute towards carbon neutrality
- Focus on new campus buildings to provide future proof sustainable solutions
- Complete a macro scale heat and power feasibility study
- Define and implement a heat recovery programme within our heritage estate
- Review of strategic travel and transport policies
- Create a biodiversity plan

Governance Challenges: Estates, Scope and Offsetting

- Difficult parts of the pathway
- Estates development vs. embedded and operational carbon
- Scope 3 emissions (travel, commuting, procurement) remain stubbornly high
- Designing credible, just and transparent offsetting strategies
- Managing perceptions and expectations:
 - Alignment between rhetoric and visible action
- Need for strong, transparent governance to maintain trust and legitimacy

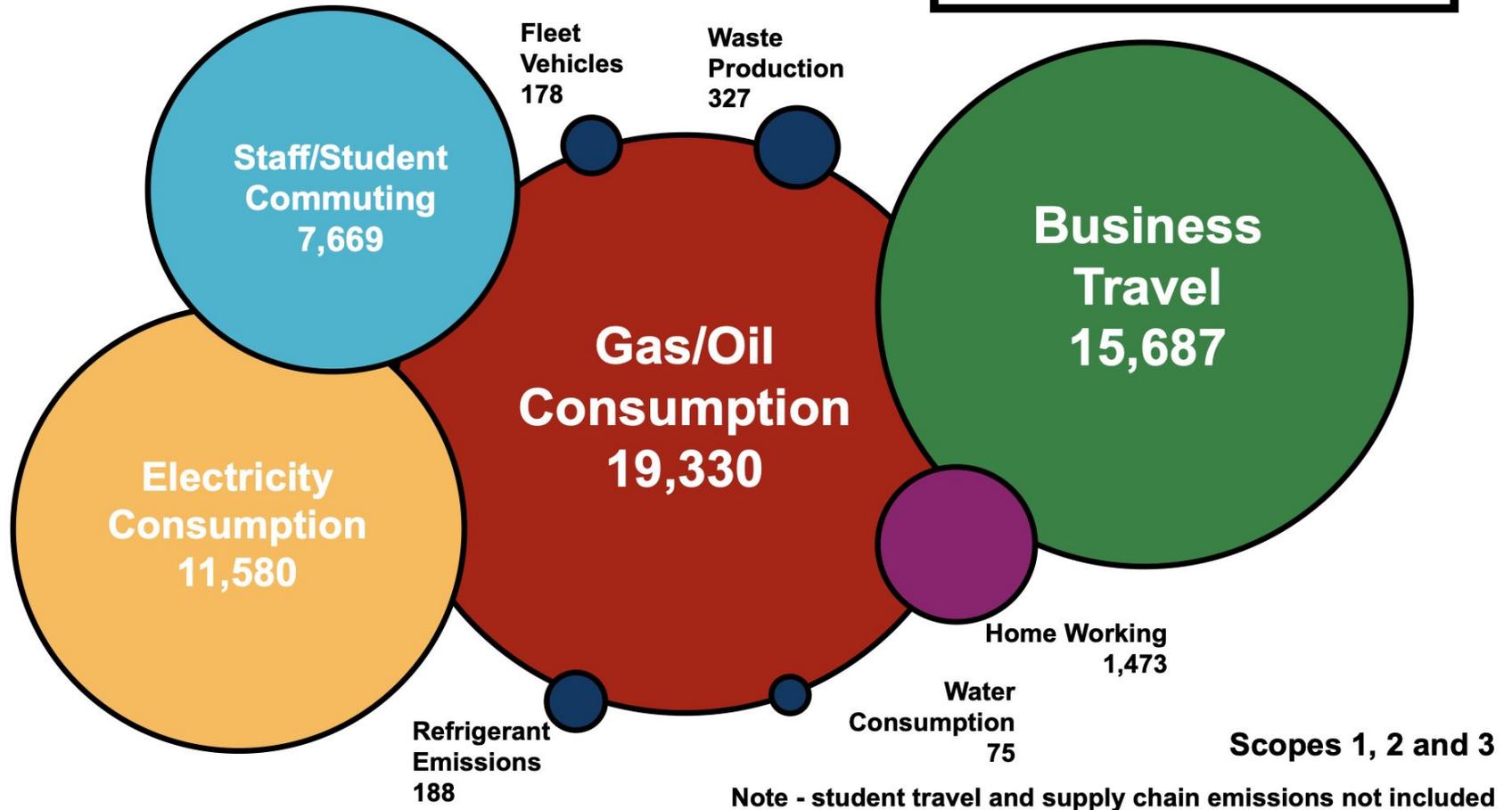
Lessons for Governing for Net Zero

- Key design principles from the Glasgow case
- Treat sustainability as a core strategic objective, not a sub-theme
- Create clear vertical accountability:
 - Court → ESC → SSDB/SWG → delivery boards
- Match high-level targets with:
 - Detailed pathways
 - Funded delivery programmes
- Establish an enabling centre to bridge operations, research and teaching
- Embed sustainability in:
 - Procurement
 - Travel
 - Estates
 - Risk and reporting
- Use rankings and external assessments as tools for learning and leverage, not just prestige

Metrics and Targets

2023-24 Emissions Carbon Footprint Data
(measurements in tCO₂e)

Total 56,507 tonne CO₂e



The approach is to make every operational asset of the University carbon neutral (in operation) and resilient to the changing climate.



Conclusion and Link to the Winter Institute

- Governing for Net Zero: Reflections and next steps
- Governance is central to credible net-zero commitments
- The University of Glasgow offers a rich, evolving example
- Many of these lessons are relevant beyond Glasgow:
 - To other institutions
 - To regional and international partners
- The 2026 NTNU × Glasgow × Kyushu Winter Institute provides:
 - A shared space to exchange experiences
 - Opportunities to co-develop new approaches to “learning for a sustainable future”
- Thank you – questions and discussion