

Fife Council

The Leading Green Council

Steve Anderson

Sustainable House



What Does It Mean?

Sustainable Development:

“meeting the needs of today without compromising the ability of future generations to meet their needs”

How do we achieve this principle in the construction industry?

Environment

environmental
impact



landfill



construction waste

Global Warming

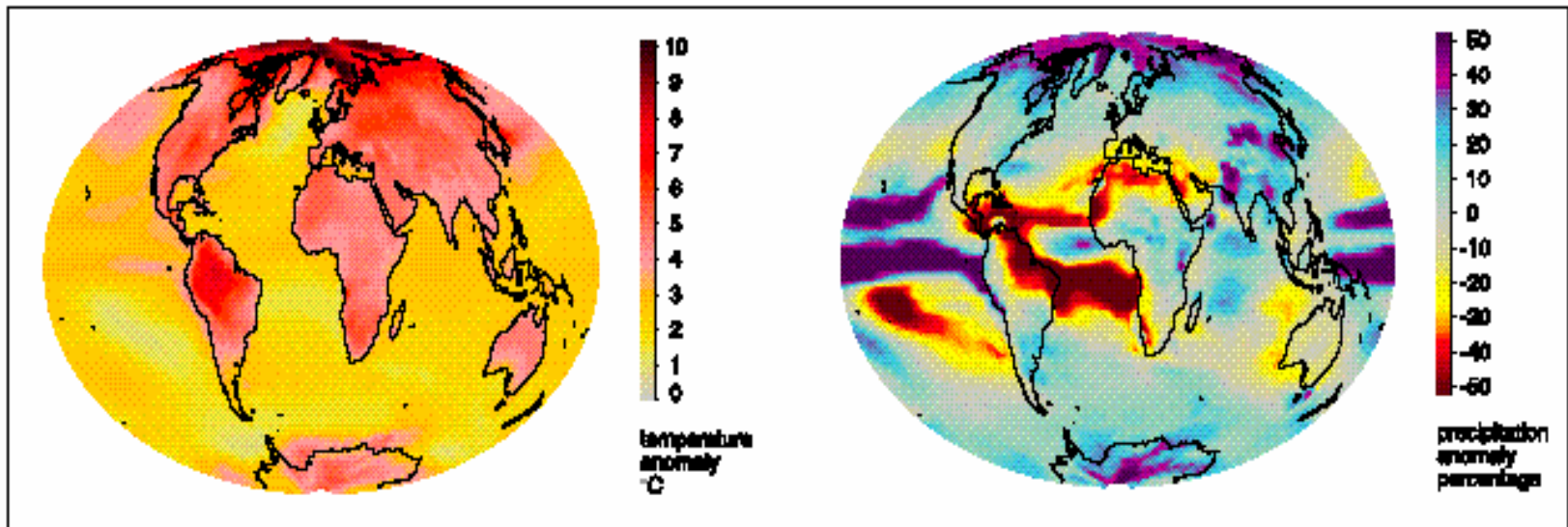


Figure 22: Change in annual average temperature (left) and precipitation (right) for the 2080s period, relative to 1961-1990, for the HadCM3 ensemble-average under an A2 forcing scenario.

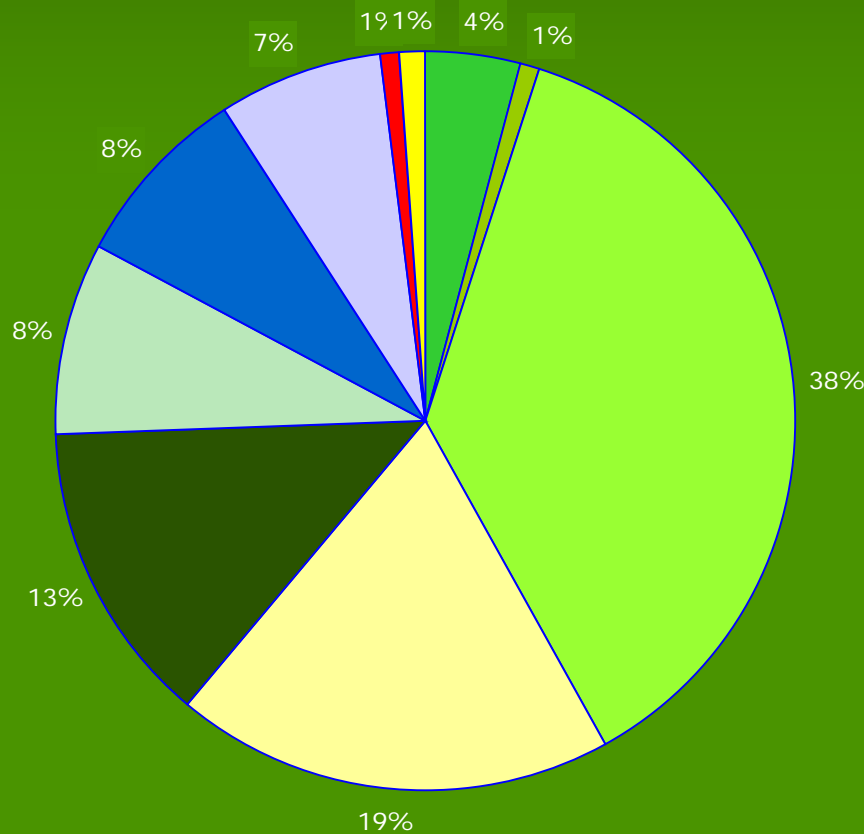
How does Fife measure its Carbon Footprint?

The footprint is made up from calculating the CO₂e for the following elements:

- *Energy Footprint*
- *Transportation Footprint*
- *Waste Footprint*, which includes landfill gas emission
- *Water usage*; and
- *Procurement of goods and services*

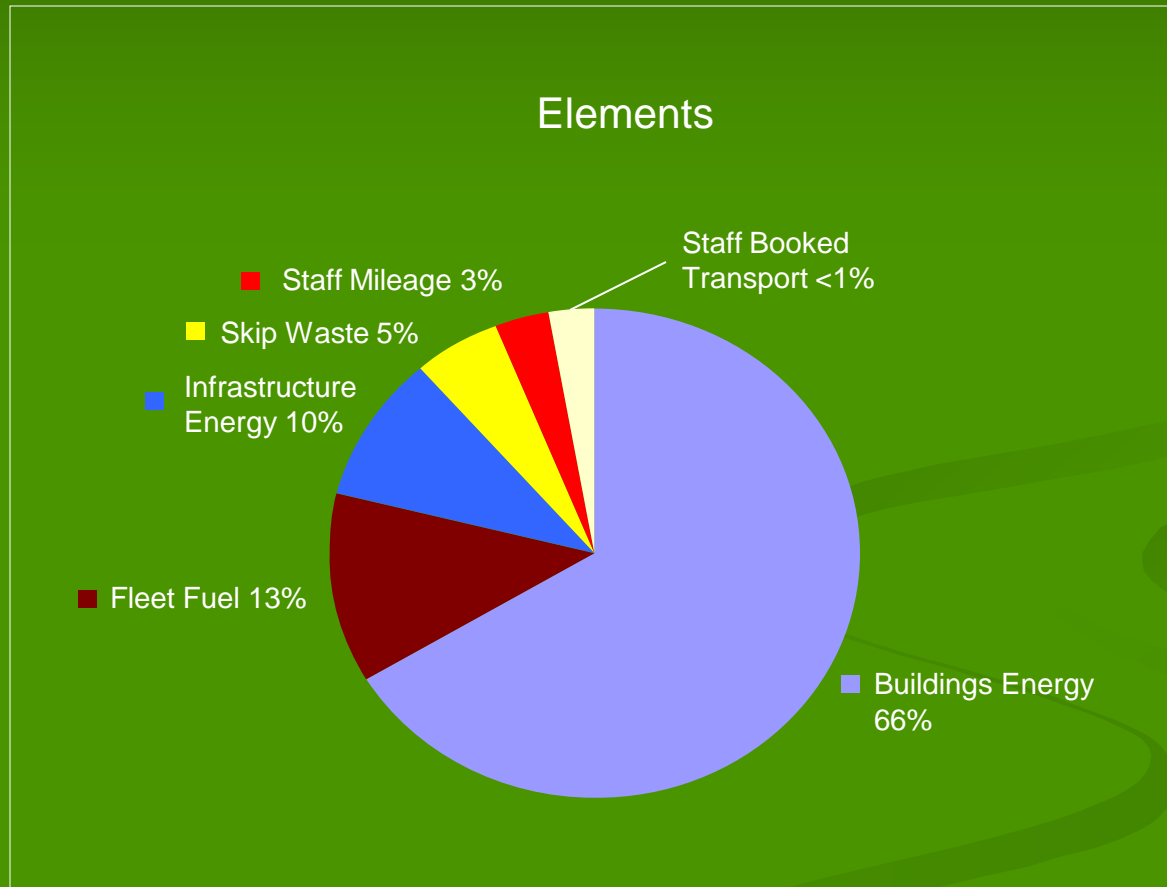


Council Services Emissions

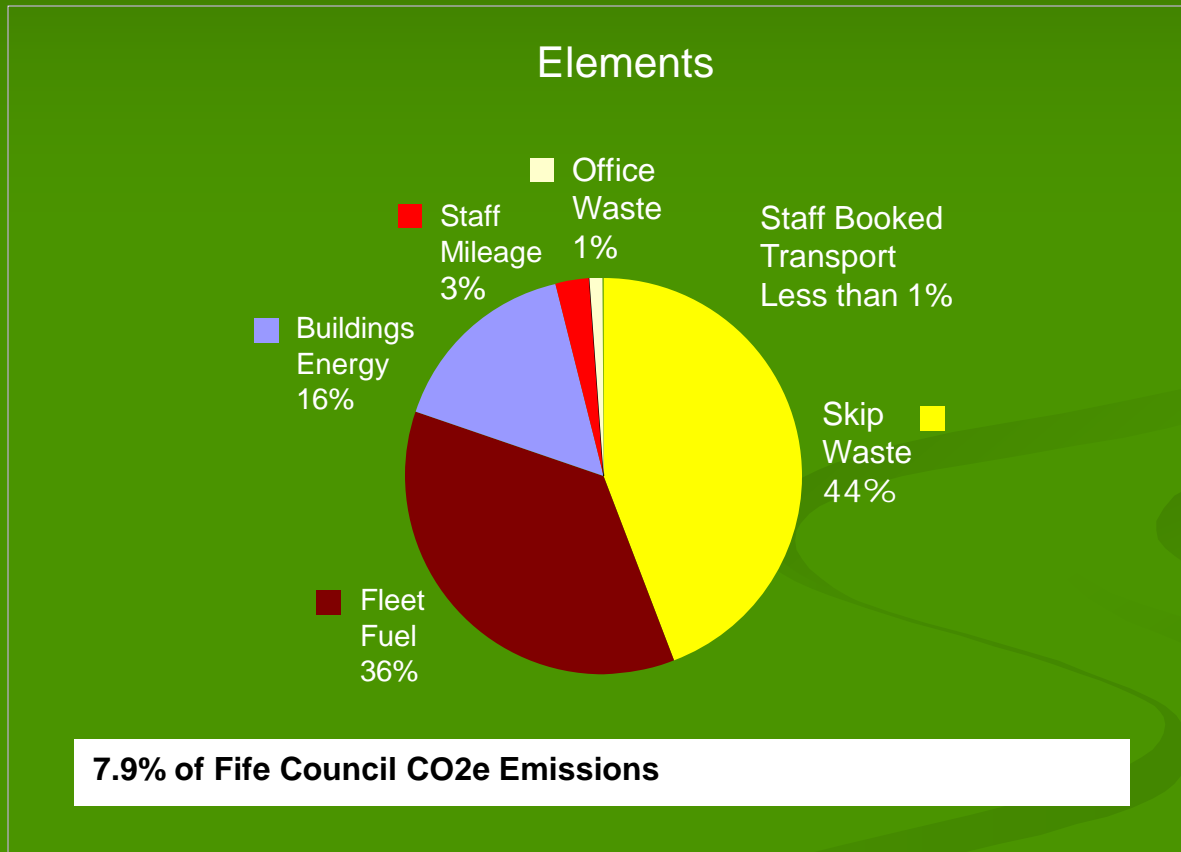


- housing
- fire and rescue
- education
- community services
- transportation
- asset and facilities
- social work
- enviromental services
- local services
- other services

Council Elements



Asset & Facilities



CONSTRUCTION – the waste problem?

- cost up to 3.5% project value
- C&D waste = 10.6 Mt* (2005/06)
- 48% of Scottish Waste
- 26% of construction waste is packaging
- 13% raw materials from UK construction sites discarded unused



Building Services

- zero landfill 2009
- efficiency of fleet
- efficiency of our buildings
- site waste management plans
- sustainability of materials
- employee training

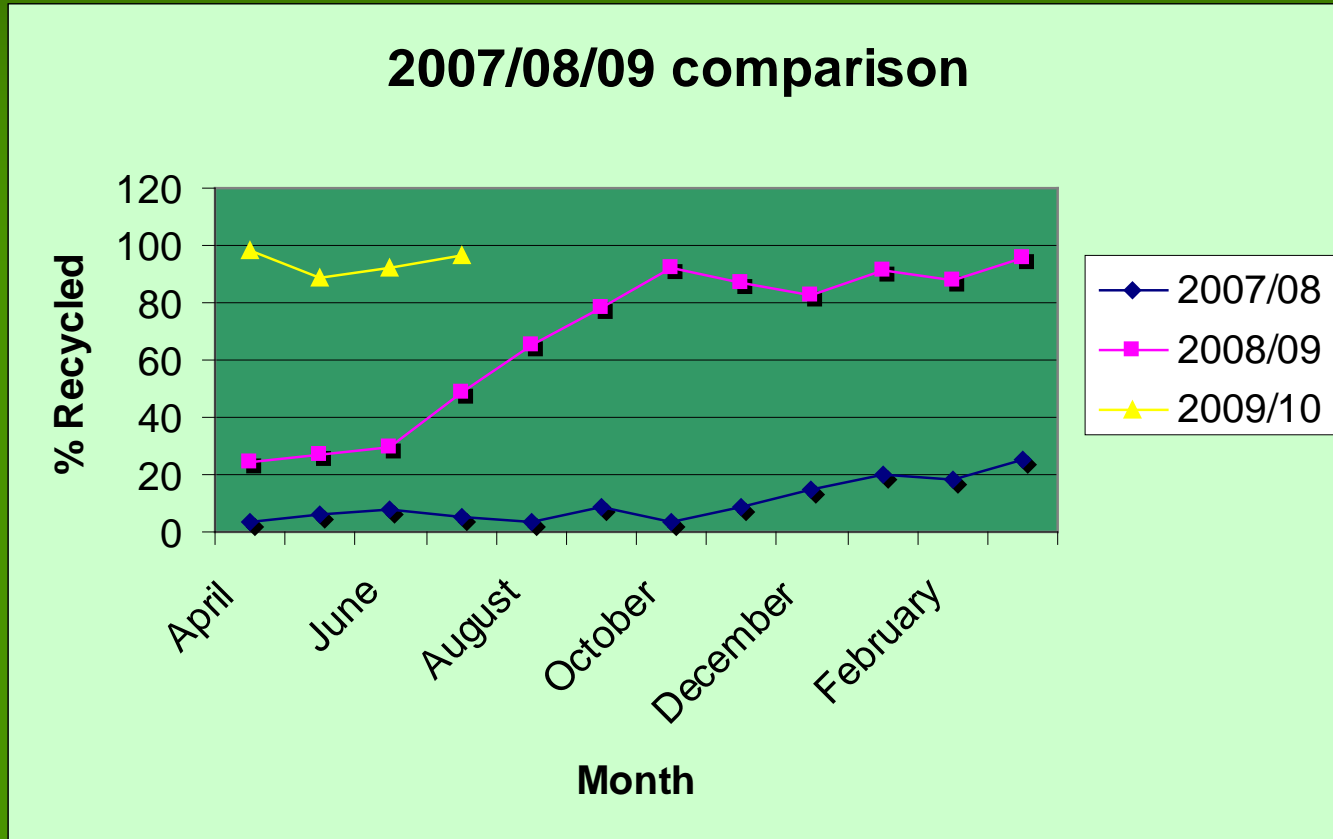


Recycling

- BUILDING MATERIALS – what can be recycled
- OFFICE MATERIALS - paper/bottles/cans/cups/food
- WEE LEGISLATION - electrical equipment/battery disposal
- DEPOTS - dedicated recycling area recycling centre
- SITE WORKS – roofing/windows



Recycling Figures



Site Waste Management Plans

- Decision making tool for the site manager/waste manager
- Helps to predict types of waste likely to arise
- Allows for actions to be taken to reduce the percentage of waste destined for landfill

Site Waste Management Plan		envirowise}	
Project:			
Project No:			
Details:			
Site Address:			
Client:		Value:	
Start Date:		Duration:	weeks
Completion Date:			
Notes:			
Person in charge of Waste Management: Company			
If the above is not an employee, name of Company:			
Person in charge of Waste Management: Project			
SWMP Author:			
Date:		Revision:	
		Date of Revision:	

Sustainability

- Procurement/tendering
- New developments/products
- Innovation
- Electricity/heating
- Commitment/support



envirowise } SUSTAINABLE PRACTICES
SUSTAINABLE PROFITS

Conclusion

- Big challenge
- Environmental regulation & targets
- Make a difference

questions?