

#### A Carbon Neutral University by 2016

#### EAUC Energy TSN Feb 2015

#### David Stutchfield – Energy Officer

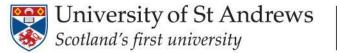
www.st-andrews.ac.uk



# University Estate Overview

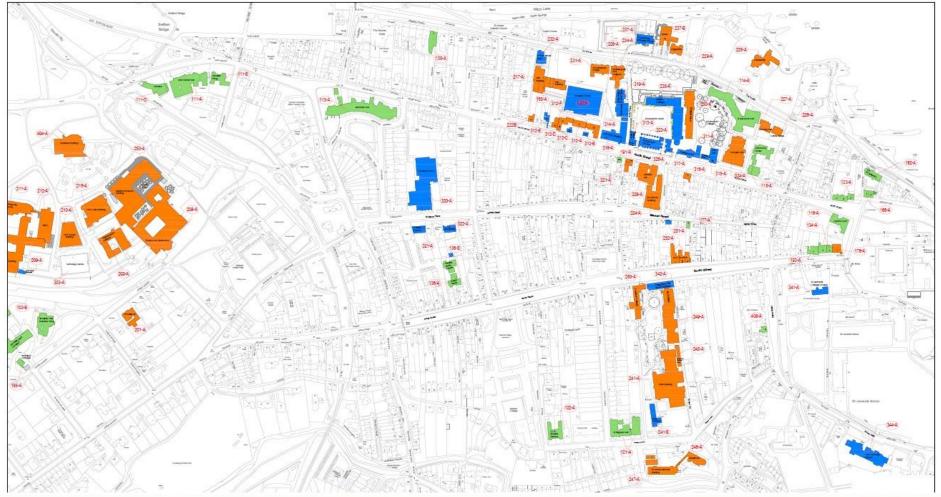
- 168 Buildings
- Gross area of all buildings is 316,000 sq m
- 210 acres excluding farmland
- Oldest building is St Leonard's Chapel (1413)
- 8,200 students
- 2,100 staff
- £2.6m/yr elec
- £2.4m/yr gas





#### 600 YEARS 1413 – 2013

### University Estate Overview



www.st-andrews.ac.uk

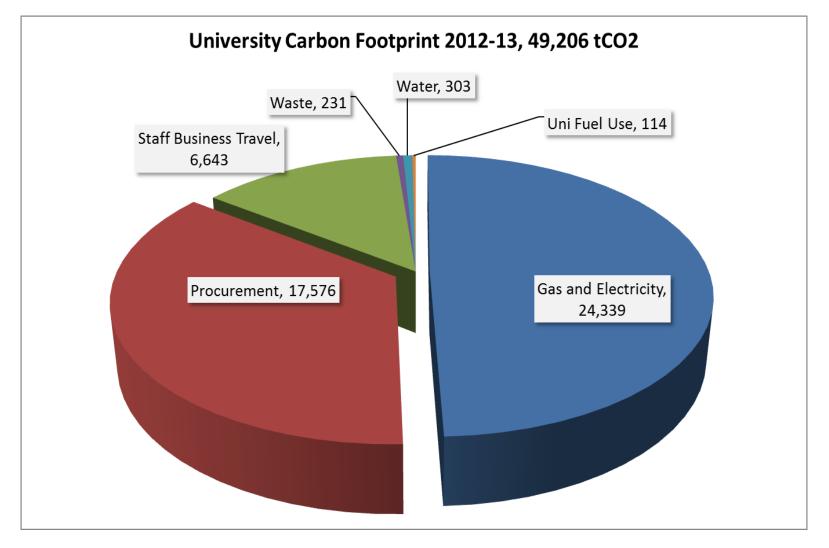
# University of St Andrews and our vision of Sustainability

- Carbon Neutral 2016
- Zero Waste
- Transition University

- Smart Buildings
- Clean Energy
- Conscientious People



## **Our Carbon Footprint**



# Salix - Boiler Replacement



Agnes Blackadder Hall - 14 inefficient boilers replaced by 8 condensing boilers = 24% energy saving, 160 tCO2.





#### Salix - CHP at Physics

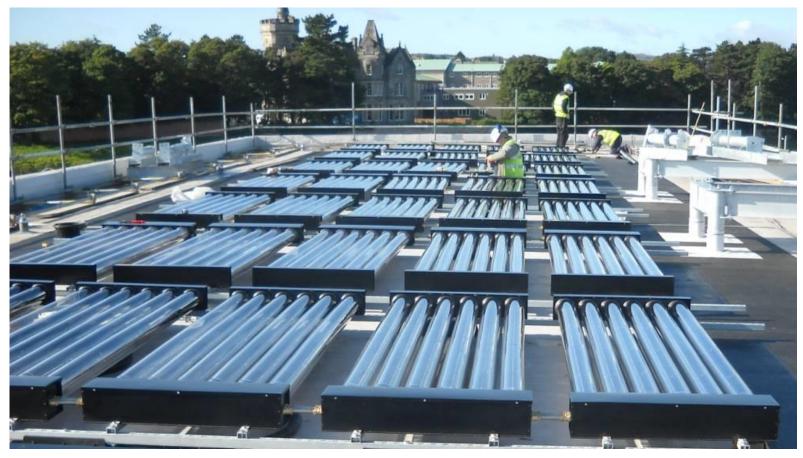
Cost £650,000, payback in 4 years, saving 808 tCO2/yr



## **Micro Renewable Projects**



#### Solar Thermal at MSB – Evacuated Tube





# University Large Scale Renewable Projects



Kenly Community Wind



#### Guardbridge Biomass district heating



3D view of proposed biomass energy centre site - the biomass energy generating process will be contained within the existing Pulp Shed, and a new flue is to be constructed on the western side of the shed

#### www.st-andrews.ac.uk

#### **GREEN TOURISM GOLD - DAVID RUSSELL APARTMENTS**



- Visit Scotland Scheme
- Use of design features to promote Green Tourism
- Rain water reuse
- SUDS Basin
- Energy saving design and controls
- Biodiversity walks and tips
- Bus link to town
- Robust recycling
- Good communication to visitors
- Procurement
  - A-rated appliances
  - Sustainable wood sourcing
  - Fairtrade

Latest News – Agnes Blackadder and McIntosh Halls Achieve Gold!

### Thank You

