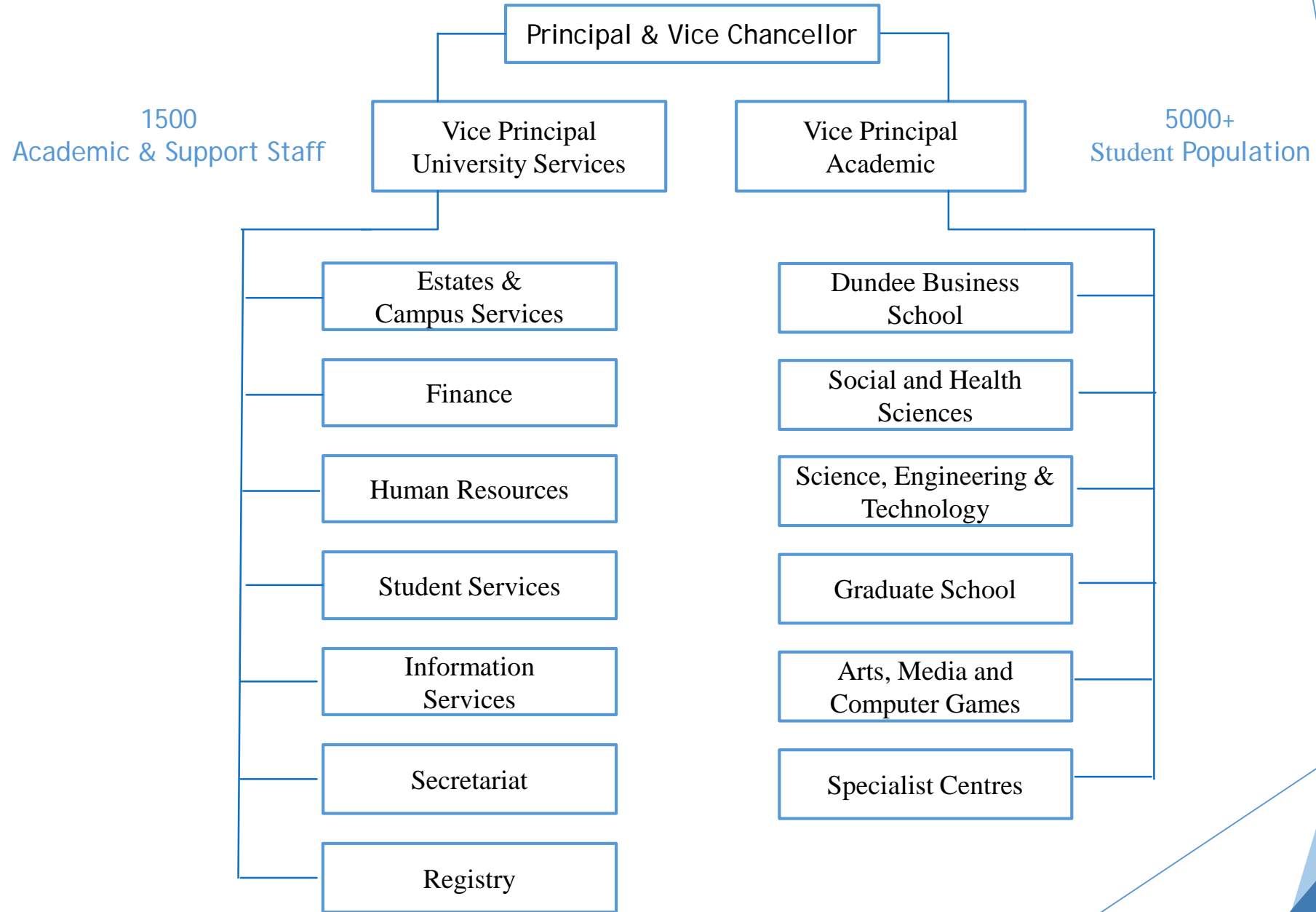


# Structure of Abertay University



## Why Manage Our Waste?

National Level:

**The UK Government Sustainable Development Strategy  
“Securing the Future”**

**Department for Environment & Rural Affairs 2005 (DEFRA)**

The above strategy demonstrates the government’s commitment to the minimisation of waste and that recycling has been identified as a priority focus.

A key priority in achieving sustainable development is to consider the management of waste including the recyclable resources embodied in that waste and with society’s perception of waste changing from unwanted to an unused resource, the UK is moving in the right direction.

# Why Manage Our Waste?

Local Level:

## Education

- Cleaning ops gain competence with SVQ qualifications
- Staff encouraged to minimise waste and recycle
- Students in residences educated in recycling initiatives

## Clean Work Space

- Boost morale for existing staff
- Improved university reputation
- Minimises waste disposal costs



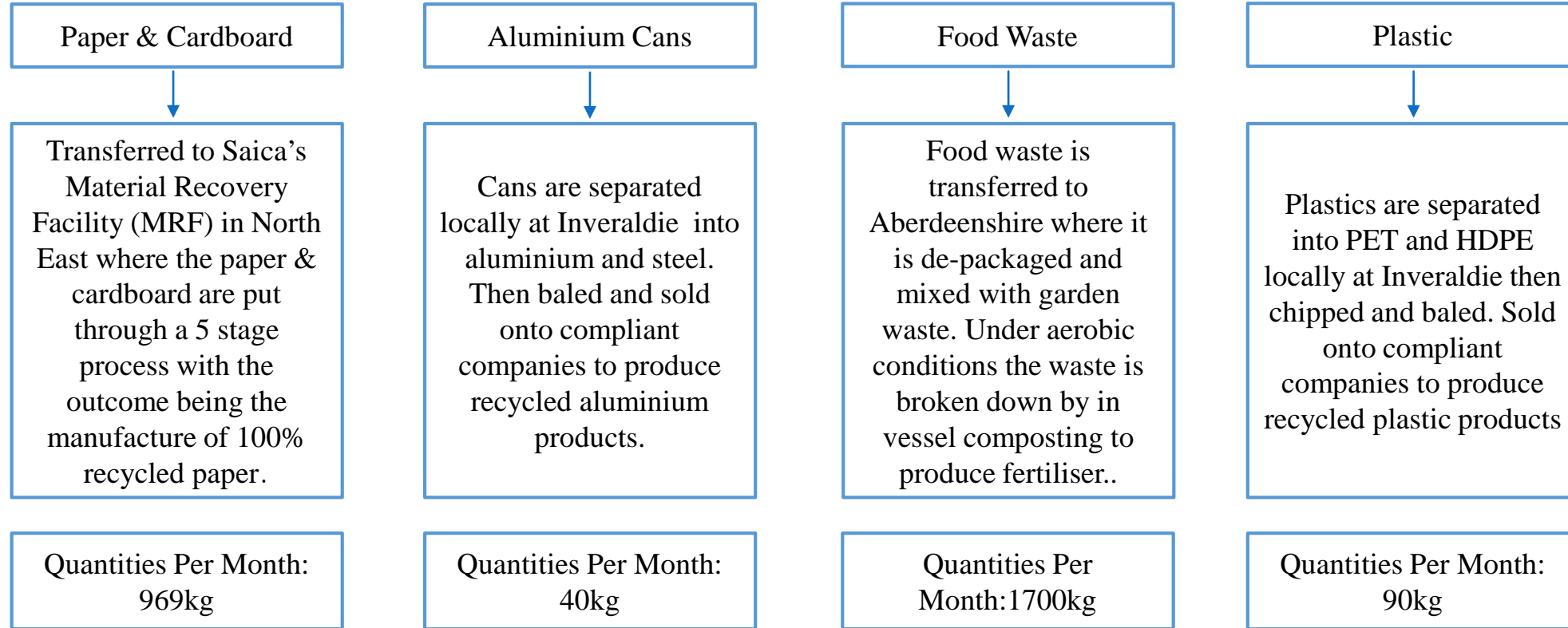
## Legislation

- The Waste (Scotland) Regulations 2012
- The Environmental Protection(Scotland) Regulations 2014
- The Special Waste Amend(Scotland) Regulations 2004

## Landfill Tax

- The Landfill Tax(Scotland) Act 2014
- Tax devolved to Scottish Government on 1 April 2015
- Standard rate currently set at £82.60 per tonne

# Where Is Abertay's Waste Going?



General Waste



Transferred locally North of Dundee, recyclable timber, soil and stones are segregated with all non-recyclables deposited in a landfill site.

Recycling Facilities at Abertay University





Waste Compound at Abertay University



# FOOD WASTE

The vehicle then takes the food waste to Keenan's Anaerobic Digestion Facility in Aberdeenshire



Food Waste from the Training Kitchens, Student Centre & Staff Areas



Food Waste is collected into dedicated food waste bins with a bio degradable liner. The bag is then transferred into a 660ltr Eurobin ready for collection. Collection is weekly.



All food waste is taken to the reception area where it goes through a depackaging system to separate food waste from packaging. The packaging is then sent off to be treated separately and food waste is taken to the in vessel composter.



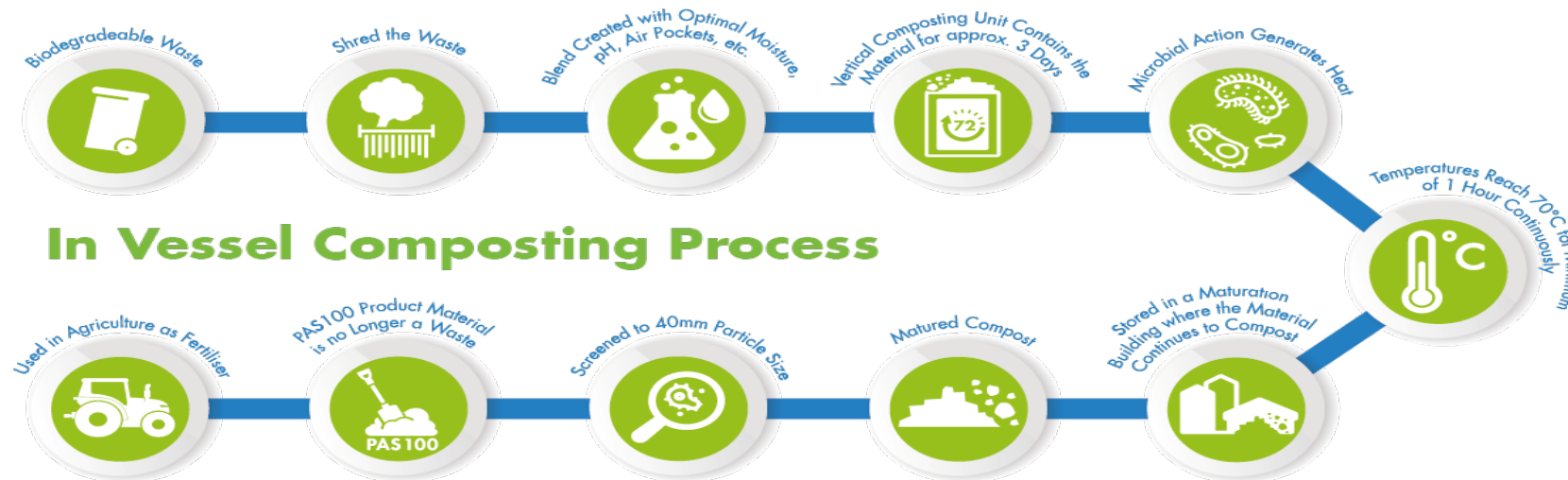
Under Aerobic conditions the food waste is broken down by heat, specific PH conditions and micro-organisms. The key outputs of the AD process are renewable electricity, heat and compost.



## Aerobic Digestion

### The Process:

Abertay University's food waste is mixed with garden and fish processing waste and turned into fertiliser in the world's largest in vessel composting plant. The biodegradable waste is placed into carefully controlled heat and PH chambers containing microbial activity which activate s the process.



### The Outcome:

Following 3 days within the in vessel chamber under controlled conditions, a premium grade fertiliser (BSI Pass 100 accredited).is produced which Kennan Recycling Ltd sell onto

farmers (95%) and landscapers (5%).

The advantage for farmers using this fertiliser is that it can be used throughout the seasons.



## Future Initiatives

Anaerobic Digestion System

Small Scale Wind Turbines

Combined Heat & Power Plant ( CHP )

Photovoltaics



Abertay  
University

Any Questions?

