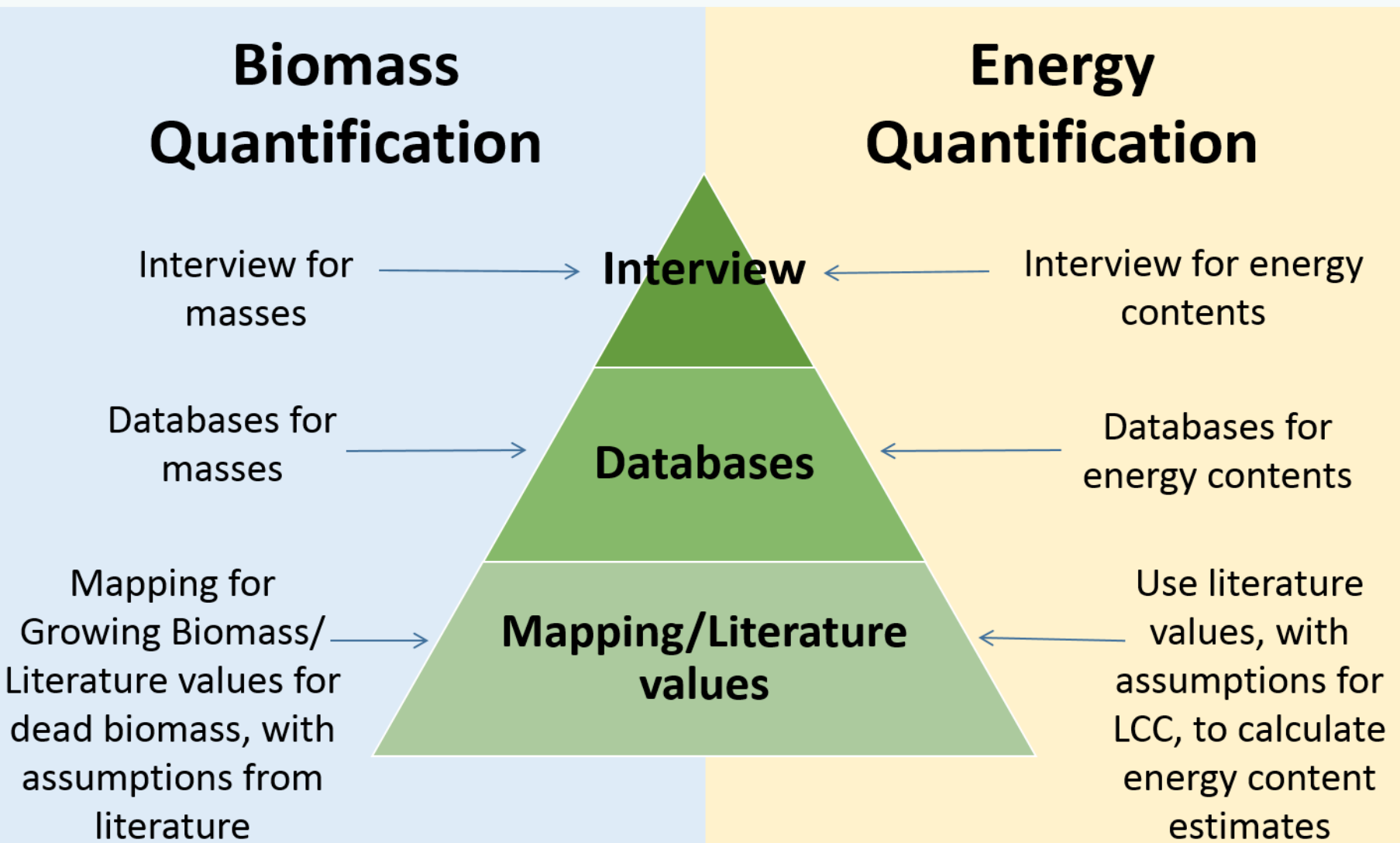


Outline

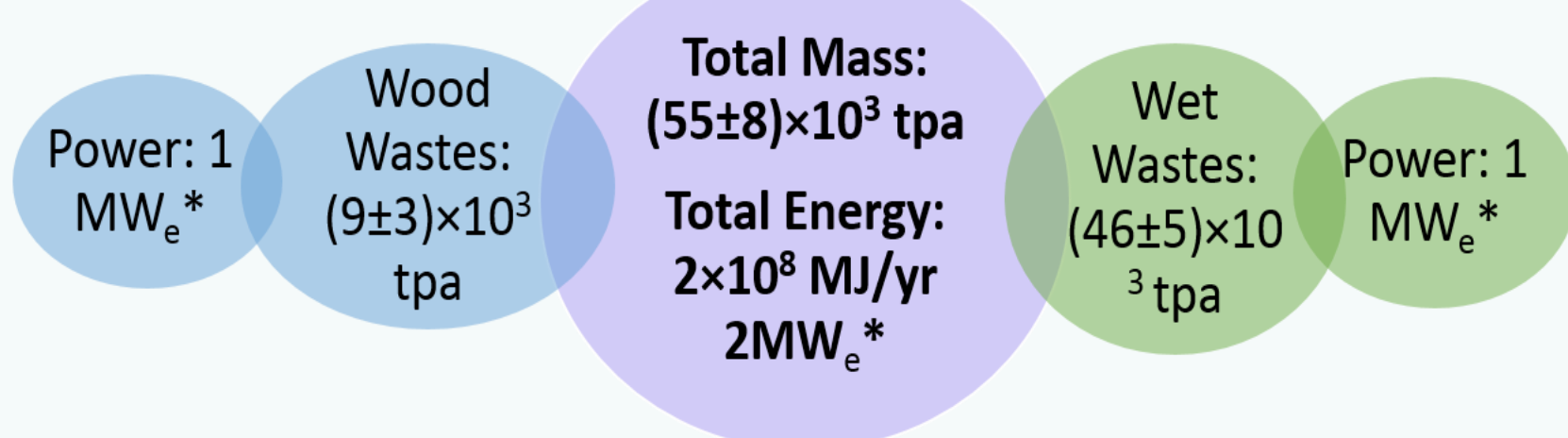
A waste biomass resource assessment was commissioned to enable Leeds City Council to minimise their waste through bioenergy applications.

- The following waste biomass resources were quantified:
 - Wood arisings from:
 - Woodland maintenance
 - Arboricultural maintenance
 - Construction and demolition waste wood
 - Green waste from:
 - Parks and countryside
 - Household garden waste sites
 - Home Farm at Temple Newsam Estate
- The technologies and applications for this wastes were considered using case studies from other cities.
- Barriers, solutions and business model recommendations were also proposed.

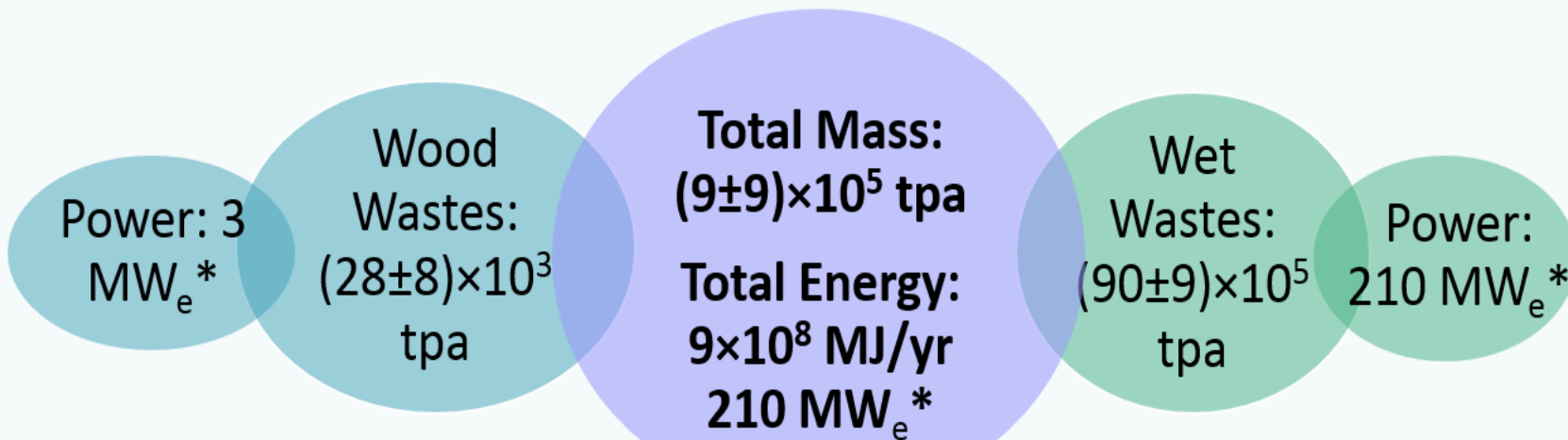
1. Quantification



Current



Potential in Future

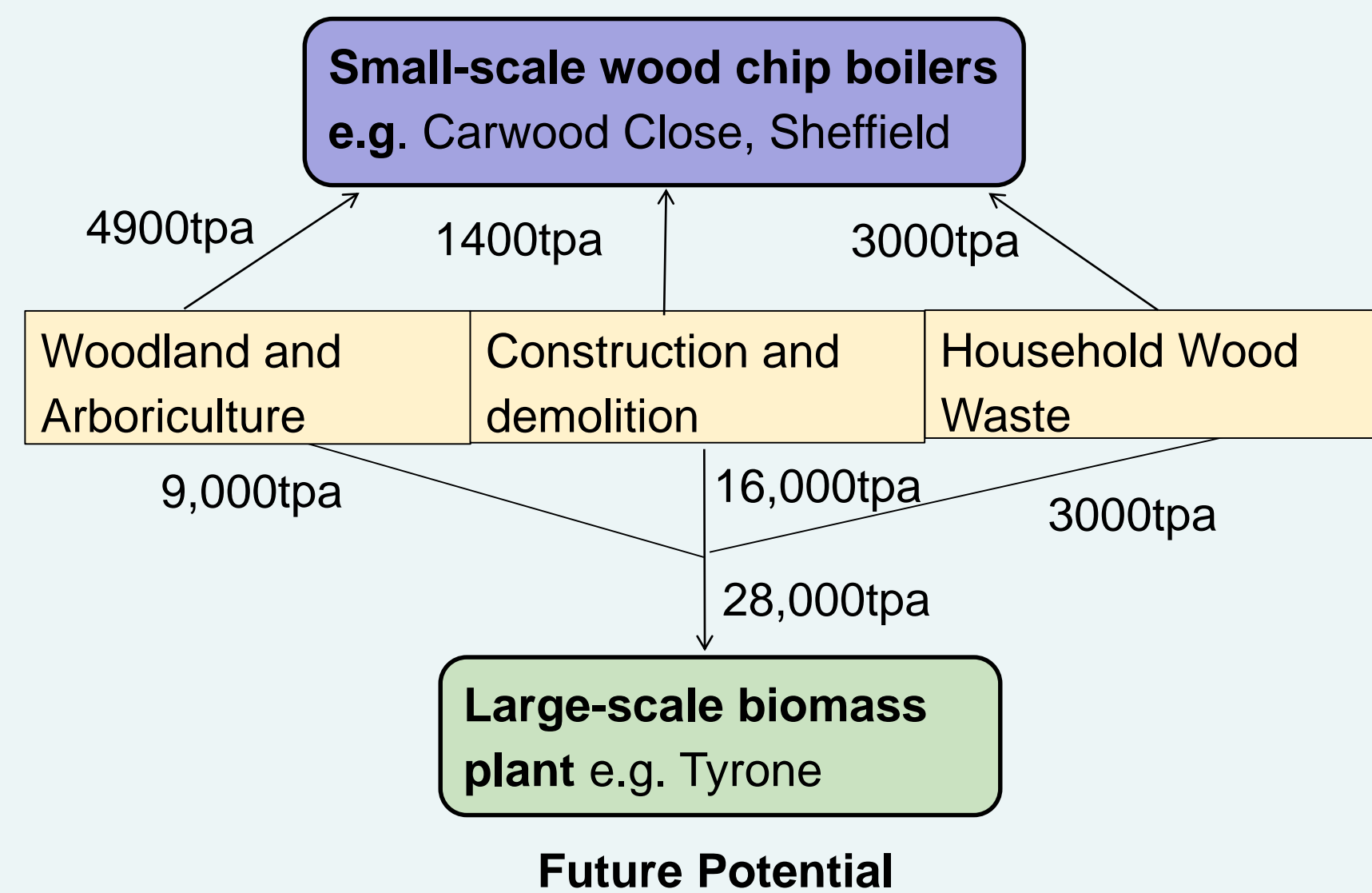


2. Technology

Combustion

Case Study	Carwood Close	Tyrone	Veolia Facility
Waste	Wood chips	Wood	Household mixed
Input (tpa)	~500	~25,000	~214,000
Output (MWe)	320 kWe	2.1 MWe	11 MWe

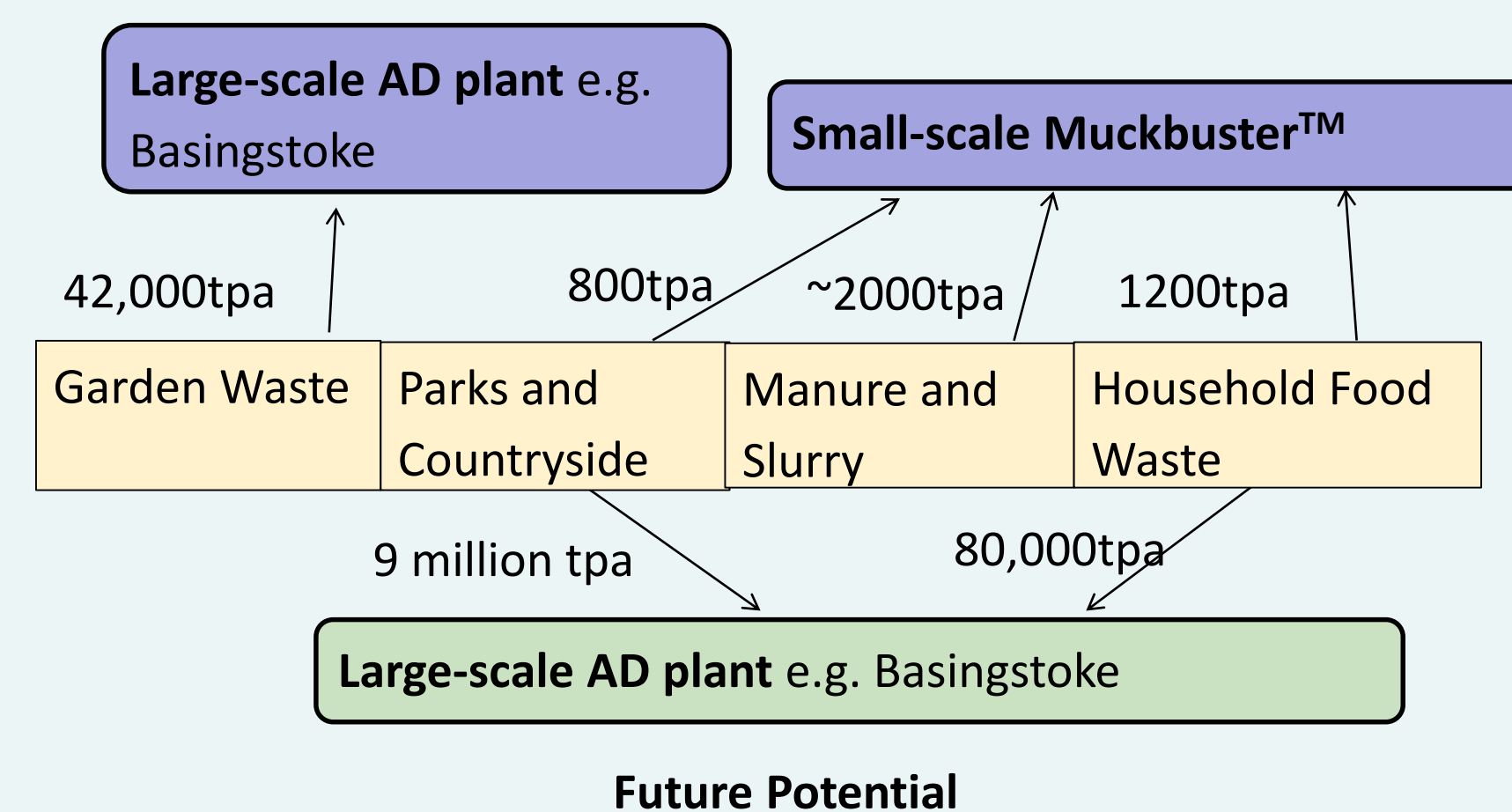
Current Potential



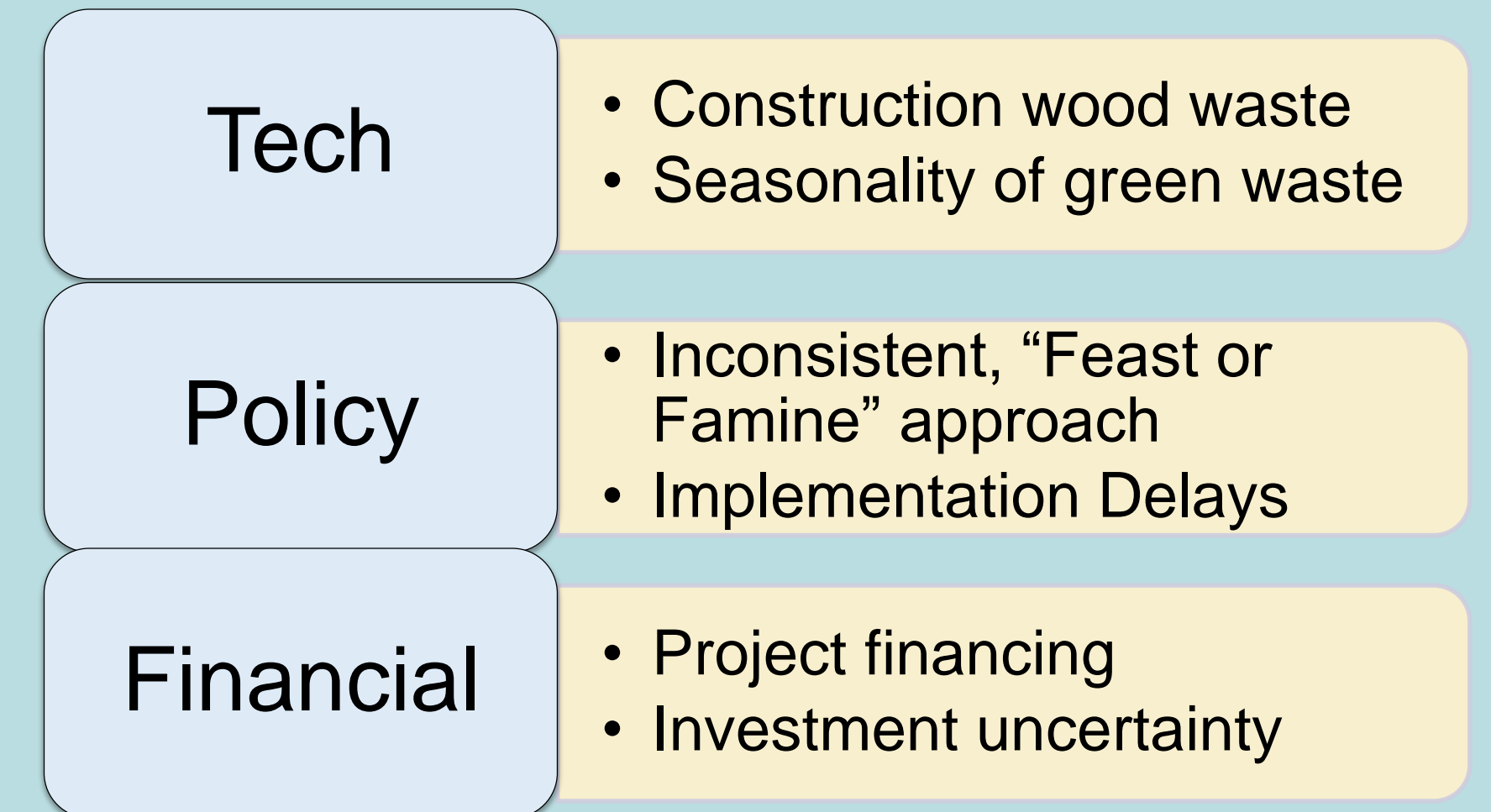
Anaerobic Digestion

Case Study	Basingstoke	Muckbuster™
Waste	Food and agricultural	Food, grass cuttings
Input (tpa)	40,000	912.5 ^d
Output (MWe)	1.5 MWe	8kWe

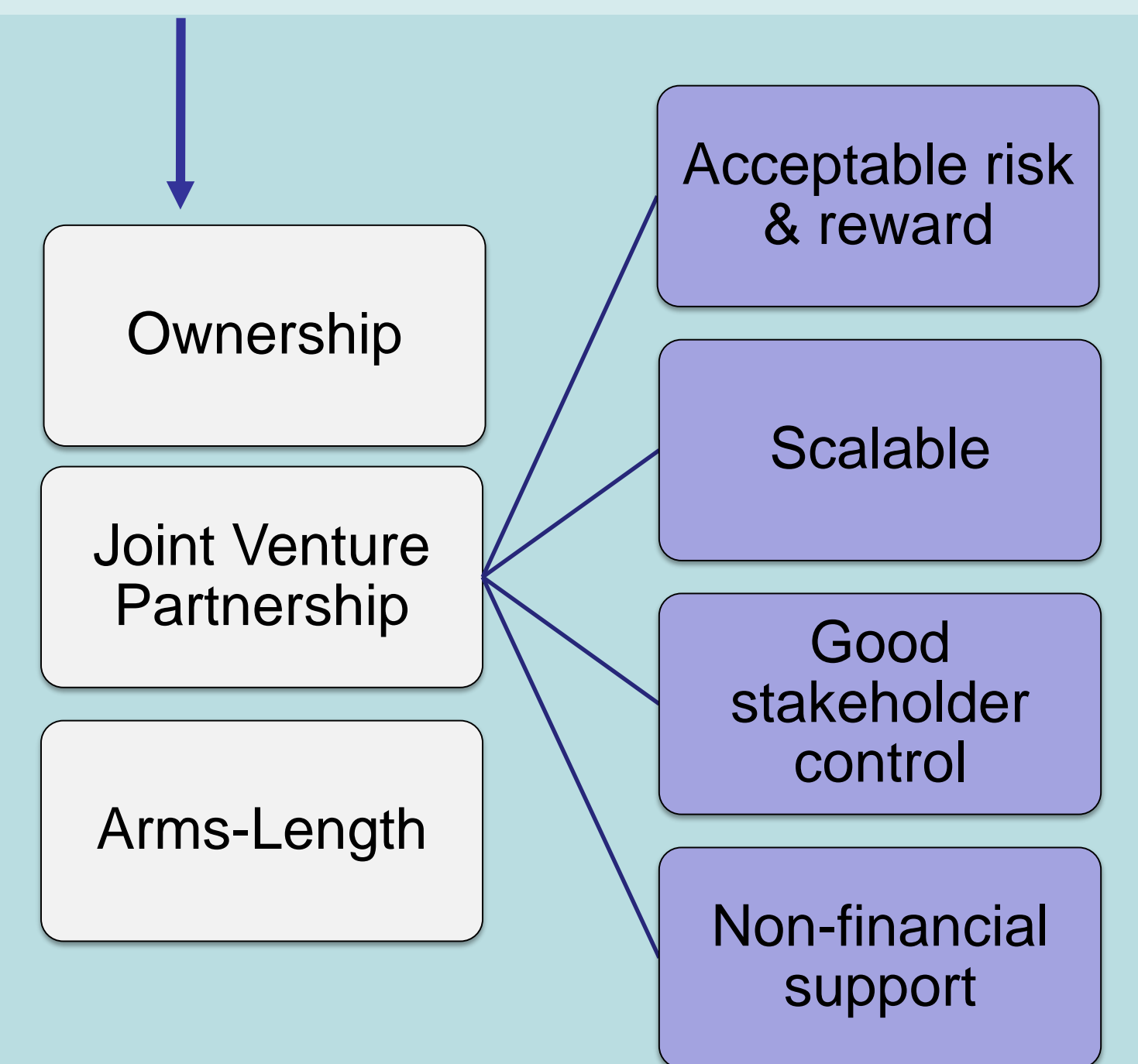
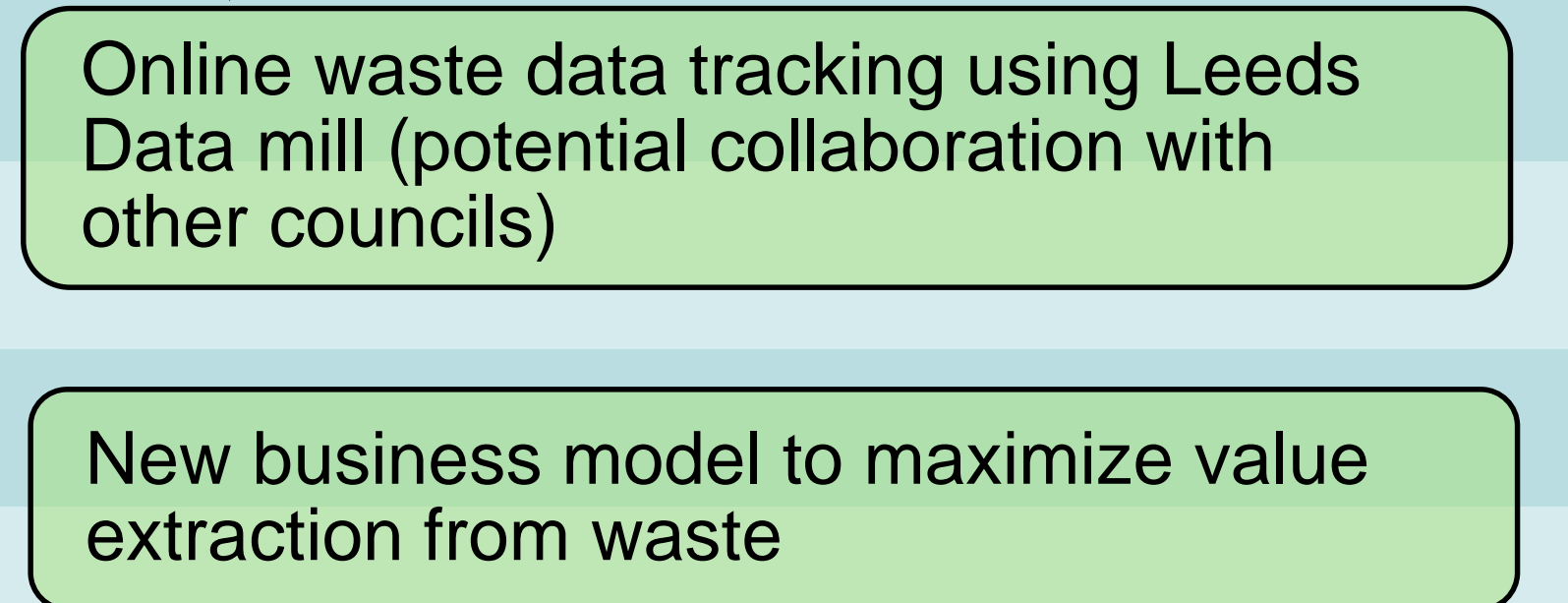
Current Potential



3. Barriers and Business Model



Solution against the barriers



APSE. 2014. Barriers to local authority involvement in municipal energy schemes. COSLA AND SFT. 2011. Report on the Commercial Aspects of Local Authority Renewable Energy Production. ECONERGY 2015. Carwood Close, Sheffield. ELEMENT 2015. Tyrone Energy [online]. Available: http://www.tyroneenergy.com/ SARIA. 2015. Anaerobic Digestion of Food Waste [online]. Available: http://www.safia.co.uk/anaerobic_digestion/index.html SEAB. 2014. Make your own green energy. [online]. Available: http://seabenergy.com/about-seab/ VEOLIA. 2015. Composting Facilities [online]. Available: http://www.veolia.co.uk/london/facilities/composting-facilities