**Sustainability Food Challenge Extra Information for Friday**

**BIOGAS EXPERIMENT**

**Background**

As the human population grows to reach 9 billion by 2050 and the effects of climate are uncertain, discussion link back to food security as we consume significantly more meat than we do today. Many industries are looking towards intensive farming practices. As there is a shift to smaller farming areas its necessary to congregate animals, feed and production infrastructure into smaller areas, which leads to the issue of what to do with the waste products? And how do we ensure intensive farming practice are environmentally sustainable, economical and ethical.

**Outcome:** Students learn how the biogas project reduces environmental impacts of intensive pork production by utilising piggery waste and converting it into biogas and concentrated fertiliser.

**Workshops**

Each group is delegated 1 hour to focus on the biogas project at Urrbrae. The group will be split in two, with half participating in the ‘Industry Biogas’ workshop at the piggery and the other half going to the glass house and looking at the smaller ‘Biogas Demonstration Module’.

**The group groups will swap over at half way** (20 minute activity **--** 10 minutes transition time)

**Industry Biogas** – 20 Minutes - students meet Rob Patterson at the piggery.

**Biogas Demonstration** **Module –** 20 Minutes **-** students meet Mrs Breeding at the glass house.

**Contact Information**

**Rob Patterson** – 0414 682 516 – rob-p@enersalt.com.au

**Ann-Louise Breeding** – 0457 722 997 – annlouise.breedign530@schools.sa.edu.au

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| Time  | Group  |
| 9:00am – 10:00pm  | **Group 4A *Thompson*** – meet at piggery **Group 4B *Innes*** – *meet* at glass house (nth side of M block)**SWITCH AT 9:30am** |
| 10:00am – 11:00am  | **Group 3A *Chigros*** – meet at piggery **Group 3B *Gibbs*** – meet at glass house (nth side of M block)**SWITCH AT 10:30am** |
| 11:00am – 12:00pm  | **Group 2A *Fistr*** – meet at piggery **Group 2B *Brookes*** – meet at glass house (nth side of M block)**SWITCH AT 11:30am** |
| 12:00pm – 1:00pm  | **Group 1A *Kempe*** – meet at piggery **Group 1B *Fenougty*** – meet at glass house (nth side of M block)**SWITCH AT 12:30pm** |