

CHP Information & Demonstration Day

Friday 11th July 2008

Crowne Plaza Santry & AIB Swords

Nessa Duggan, SEI

Agenda

10.30 **Welcome & Introduction**

- CHP Support Instruments
Nessa Duggan (SEI)

10.40 **CHP for Irish Hotel's**

- The Rochestown Park Hotel Case Study
*Michael Mullarney (Temp Technology) &
Tony Lyons (Rochestown Park Hotel)*

11.10 **A Sustainable Pathway for CHP in Commercial and Public Buildings**

- The St Patrick's Hospital Case Study
Aidan McDonnell (F4 Energy)

Agenda

11.30 CHP Options for Supermarkets and Retail Chains

- The Tesco Case Study
Michael McNerney (Tesco)

11.50 CHP/Tri-Gen Solutions for Commercial Buildings and Industry

- *Brendan Marren (CESenergy)*

12.20 Banking on Onsite Generation

- *Kevin Mulligan (AIB)*
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Agenda



**12.40 Plenary Panel Question and Answer Session
with all Speakers**

13.00 Lunch

14.00 Study Tour to AIB Swords

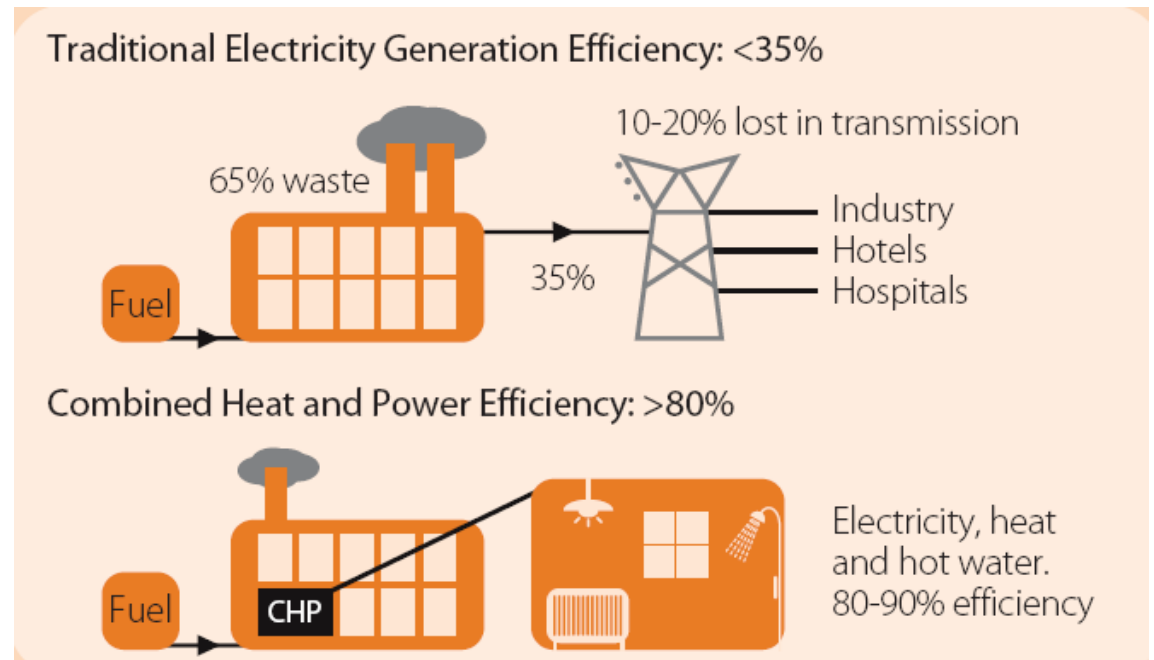
- **Tri-Generation, Heating-chilled beams**

Hosted by AIB / CESenergy

16.00 Close

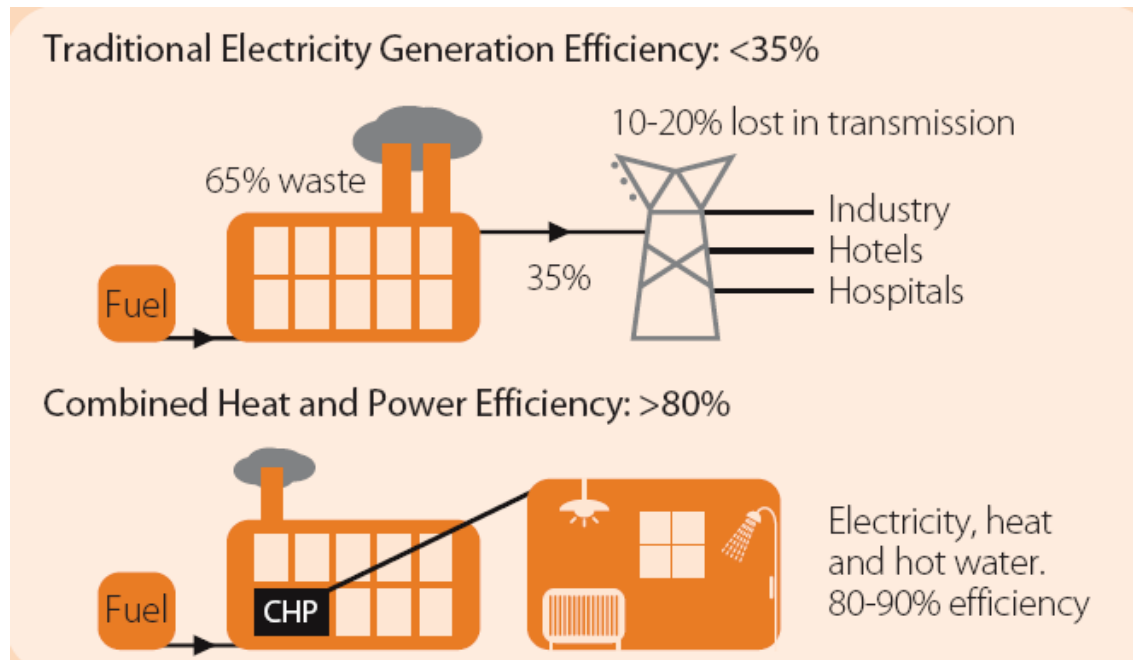
What is CHP?

- In conventional electricity generation much of the input energy is lost to the atmosphere as waste heat.
- Up to 65% of the input energy is lost with just 35% being transformed into electricity.



What is CHP?

- Combined Heat and Power (CHP) systems channel this extra heat to useful purposes so that usable heat and electricity are generated in a single process.



SEI & CHP Deployment



SEI's remit includes implementing aspects of government policy on sustainable energy

The European Union CHP Directive, seeks to create a favourable environment for CHP installations

2006 Budget, €11M, to support and encourage the deployment of CHP in Ireland, through allocation of funds for fossil fuel, biomass & AD CHP

CHP Deployment Programme 2006-2010



The CHP programme is expected to deliver

- 100 – 200 small-scale fossil fuel CHP installations
- 10 – 15 MWe Biomass CHP
- 10 – 20MWe of high efficiency CHP electricity
- estimated saving of 120,000 tonnes of CO₂

Commitments to Date

55 projects have been approved

Total installed capacity of 7.1MWe & 10.9MWth

CHP Deployment Programme – Feasibility Study Support



- Up to 40% funding for qualifying projects (discretionary)
- across all size ranges ($>50\text{kW}_e$) and technologies

CHP Deployment Programme – Fossil Fuel



Investment Grant Support

- Up to 30% for small scale fossil fuel,
50kW_e to 1MW_e (non discretionary)

50kW_e, a typical small sized hotel

1MW, a typical small industrial operation

Must be a new unit, fired by natural gas, oil or another licensed fuel

CHP Deployment Programme – Biomass & Anaerobic Digestion



Investment Grant Support

- Up to 30% of eligible project costs
- Up to a maximum of €1.5M per project

Technology	Eligible Sizes	Estimated Capacity Supported
Biomass	> 100 kW _e	5 - 15 MW _e
Anaerobic Digestion	> 50 kW _e	0.5 - 2 MW _e

Further Details



Fossil Fuel www.sei.ie/chpgrants

Biomass/AD: www.sei.ie/bio_chpgrants

CHP Installations In Ireland



	Number	Installed Capacity kWe	Number %	Installed Capacity %
Services	131	34,581	78.4	11.2
Industry	31	273,195	18.6	88.3
Other	5	1,741	3.0	0.6
Total	167	309,517	100	100

Questions?