

4.3.4 Cogeneration

There is significant interest in cogeneration, supported at a European Community level by the adoption of Directive 2004/8/EC on the promotion of cogeneration, and Directive 2003/96/EC on energy taxation, as well as by various national level policies and incentives. Relatively small scale plants may now be economically feasible, and incentives may also be available. In many cases, cogeneration has been successfully installed due to the assistance of local authorities. See Section 3.4 and Annex 7.10.3 and 7.10.4.

Utilities modelling, described in Section 2.15.2, can assist the optimisation of generation and heat recovery systems, as well as managing the selling and buying of surplus energy.

20. BAT is to seek possibilities for cogeneration, inside and/or outside the installation (with a third party).

Applicability: The cooperation and agreement of a third party may not be within the control of the operator, and therefore may not be within the scope of an IPPC permit.

Cogeneration is as likely to depend as much on economic conditions as ENE optimisation. Cogeneration opportunities should be sought on the identification of possibilities, on investment either on the generator's side or potential customer's side, identification of potential partners or by changes in economic circumstances (heat, fuel prices, etc.).

In general, cogeneration can be considered when:

- *the demands for heat and power are concurrent*
- *the heat demand (on-site and/or off-site), in terms of quantity (operating times during year), temperature, etc. can be met using heat from the CHP plant, and no significant heat demand reductions can be expected.*

Section 3.4 discusses the application of cogeneration, the different types of cogeneration (CHP) plants and their applicability in individual cases.

Successful implementation may depend on a suitable fuel and/or heat price in relation to the price of electricity. In many cases, public authorities (at local, regional or national level) have facilitated such arrangements or are the third party.