



CASE
STUDY

Case Study



Clean Energy

Aarhus, Denmark - Low-Energy Neighborhood Project in Lystrup

In Lystrup there is a Low-Energy Neighborhood Project with new development and integration of sustainable solutions both for the end-user side (building sector) and the energy supply side (district heating network).

A consortium among municipalities, industrial partners and research institutes was the main initiator of the “Lærkehaven” project for three building areas a h new development for a total of 122 of low-energy row-houses. The construction technology is based on prefabricated house structures. In one of the areas, the energy is supplied by a low-temperature 55/25°C district heating system, in twin-pipe systems, unique in Europe. Hot water is produced either directly in heat exchangers or in accumulators in some cases. This system does not require a very high demand density to be competitive. See the screenshot from the Guidelines for Low Temperature District Heating.

Guidelines for Low Temperature District Heating: System Layout and pipe specifications



Note: Alx - Aluflex twin pipes; Tws - Steel twin pipes, series 2, diffusion barrier at the outer casing.

Source: Guidelines for Low Temperature District Heating. Danish Energy Agency and EUDP, April 2014.
http://www.danskfjernvarme.dk/~media/danskfjernvarme/gronenergi/projekter/eudp-lavtemperatur%20fjv/guidelines%20for%20ldh-final_rev1.pdf (see footnote 68) page 29

References

IEA (2011) ECBCS Annex 51 – Subtask B May 2012, Final report page 26

Guidelines for Low Temperature District Heating. Danish Energy Agency and EUDP, April 2014,
http://www.danskfjernvarme.dk/~media/danskfjernvarme/gronenergi/projekter/eudp-lavtemperatur%20fjv/guidelines%20for%20ldh-final_rev1.pdf:

Credentials

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