



Sweden-Ukraine District Heating

Vision, Mission, Goals, Objectives,
Eligibility Criteria and Projects
Financing

Ronny Nilsson, Senior Adviser NEFCO
Gunnar Bark, Team Leader Sweco
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SUDH Vision

- An energy-efficient district heating in Ukraine delivering qualitative services with low environmental impact to its customers

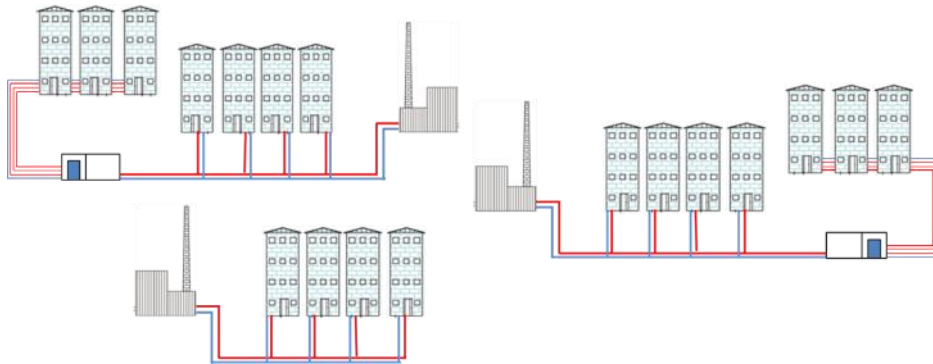


SUDH Mission

- To promote and demonstrate development of modern and energy efficient district heating with a significant share of production based on renewable and waste heat sources, aiming to meet the EU requirements for efficient district heating
- To contribute to improved and efficiency-based planning of district heating systems

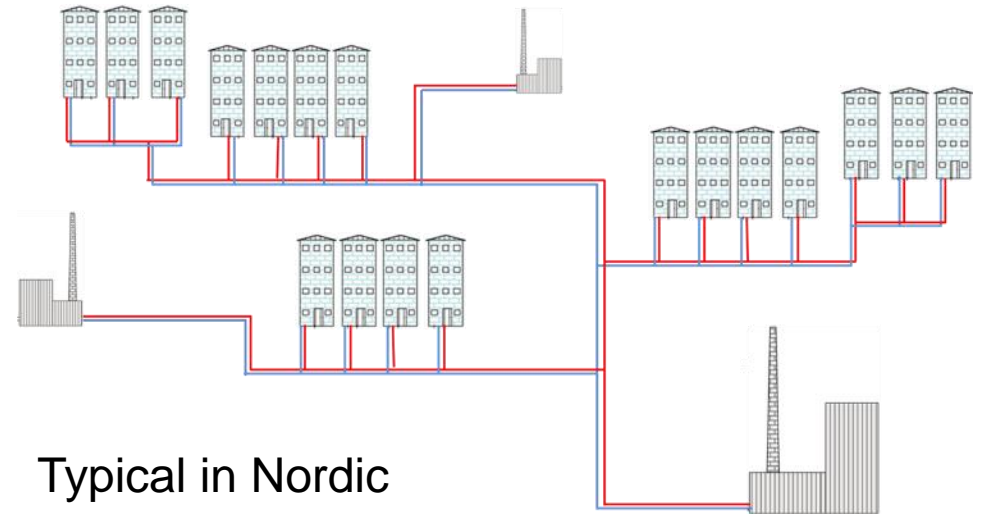
What does it mean?

DH with one production source in each network



Typical in Ukraine

Several production units jointly supplying heat to the DH network



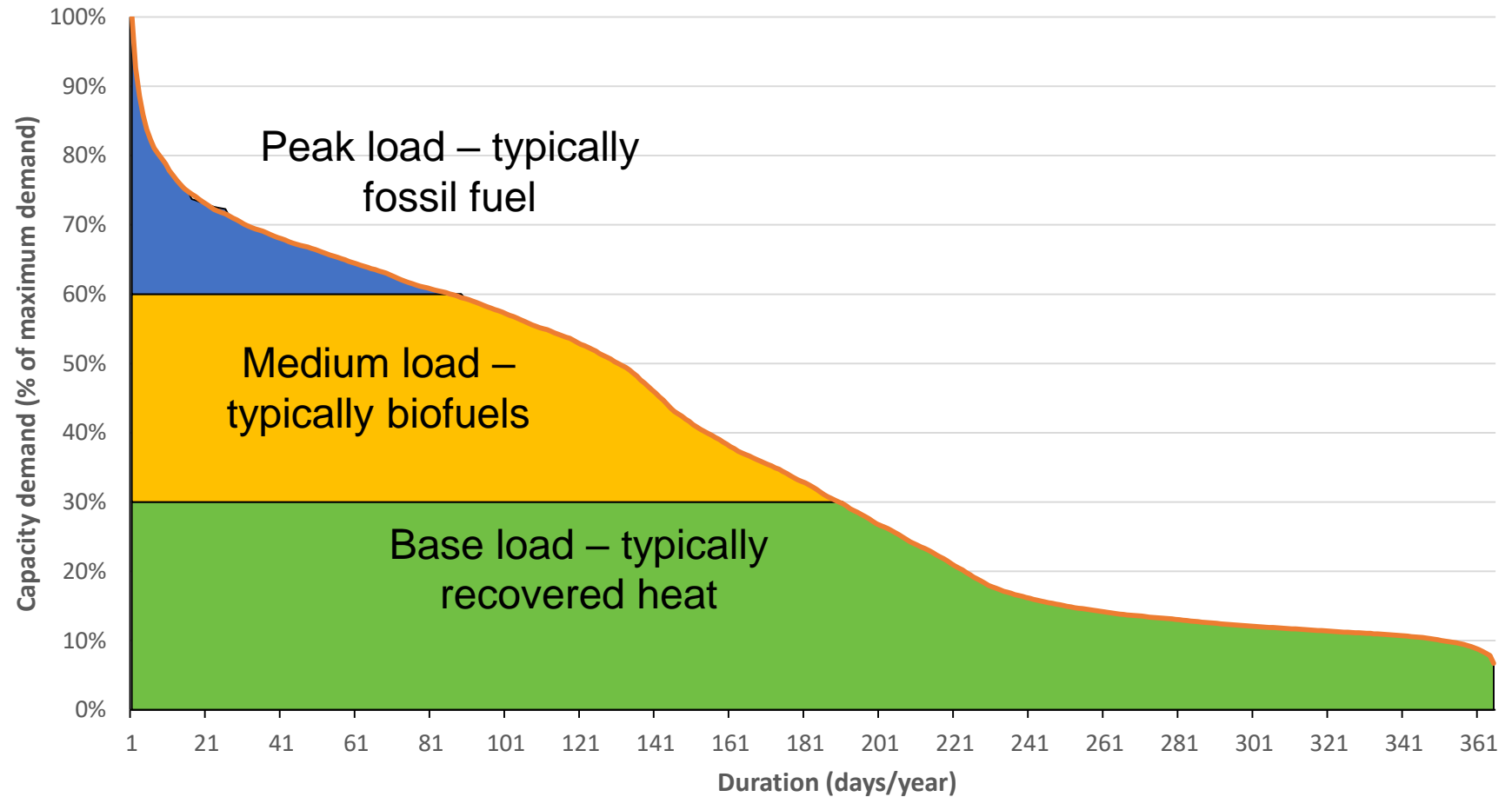
Typical in Nordic countries - fuels that are difficult and bulky to handle in small boilers can be used

SUDH Mission

- To facilitate diversification of fuels of Ukrainian district heat generation mix and reduce the use of fossil fuels



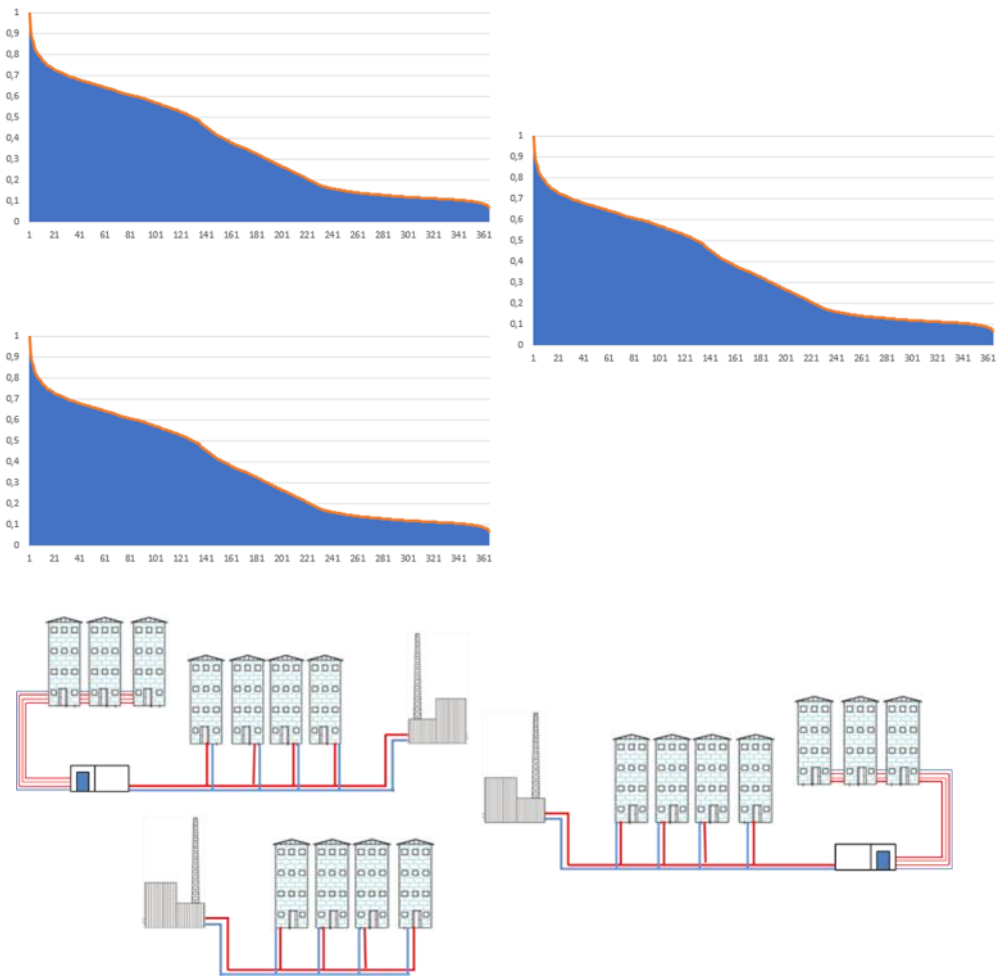
What does it mean?



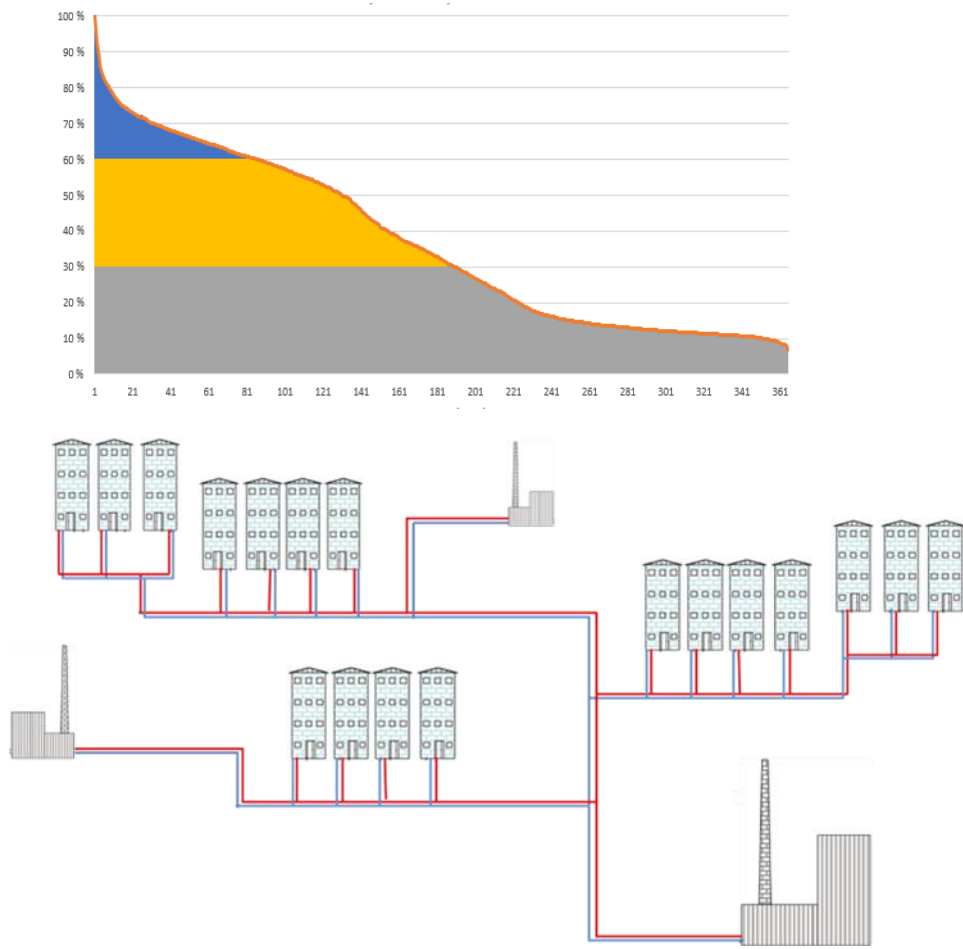


Reduced use of fossil fuels!

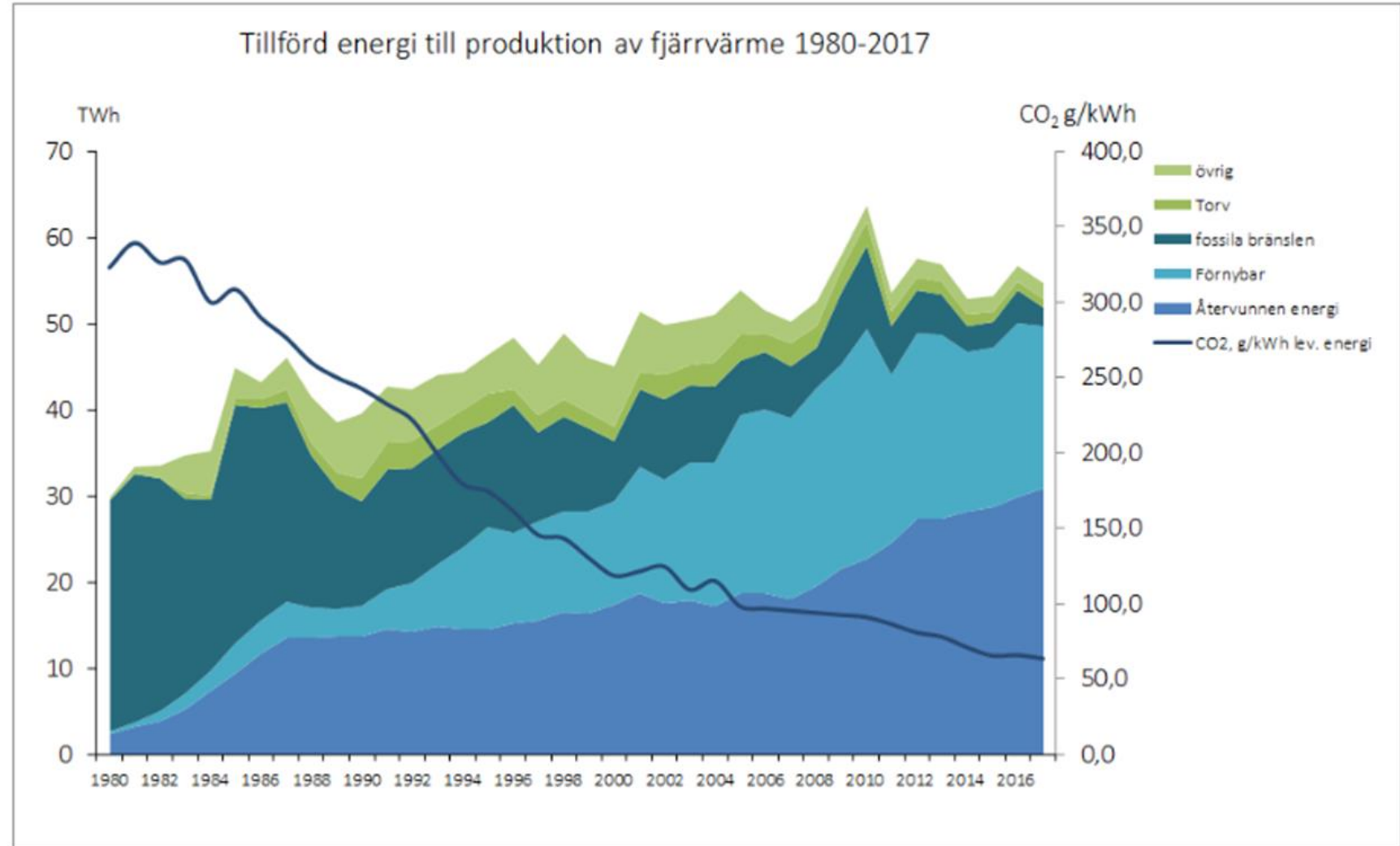
DH with one production source
in each network



Several production units jointly
supplying heat to the DH
network



Sources used for DH generation in Sweden 1980-2017



SUDH Mission

- To empower local communities in Ukraine by facilitating access for municipalities and district heating utilities to external financing aiming at strengthening local infrastructure



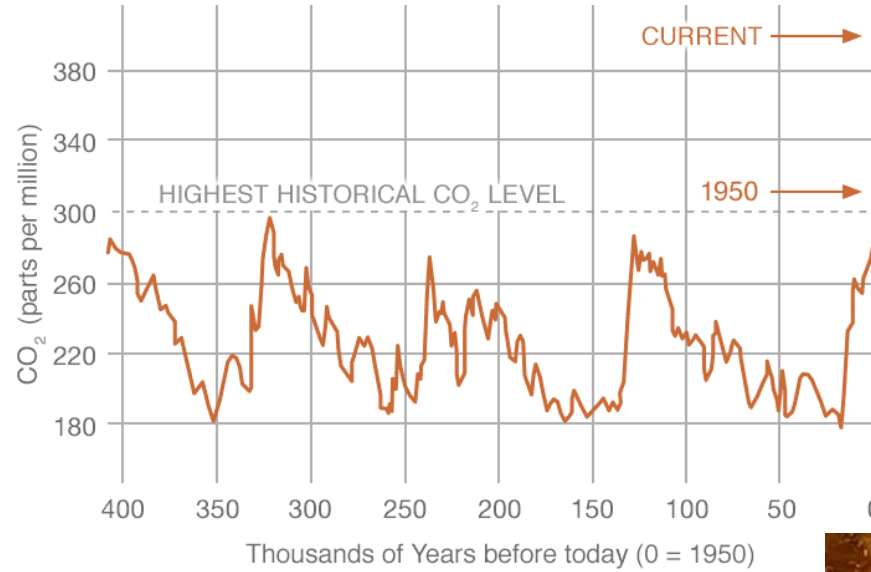
SUDH Goals

- Demonstration projects leading to long-term sustainable development of district heating systems in Ukraine
 - There is no quick fix – long term work is required
 - Demonstration is highly needed
 - NEFCO believes strongly in demonstration projects to enable development
 - NEFCO have a long tradition of financing demonstration projects in different sectors

SUDH Goals

- Increased share of renewable and waste heat sources for district heating generation
- Decreased heat consumption and heat losses in district heating
- Decreased environmental and climate impact
- Improved quality of district heating services

What does it mean?



SUDH Objectives

- Implement at least four demonstration projects in different Ukrainian municipalities;
- Bring Ukrainian district heating systems closer to the EU Energy Efficiency Directive;
- Improved quality of district heating services for about 300 000 Ukrainian citizens;
- Decreased CO₂ emissions by 40-60 000 t/year.

SUDH Eligibility Criteria

- 100% municipally owned district heating company;
- Municipal authorities strategically support district heating development;
- Municipality have to comply with NEFCO's requirements on financial stability and is ready to provide a municipal guarantee for the full loan amount;
- Municipality and district heating company are both ready to borrow in a foreign currency.

Decisive advantages

- A clear vision on district heating as a strategic tool to long-term sustainable development;
- Readiness to implement modern approaches to district heating;
- Experience in cooperation with international technical assistance projects.

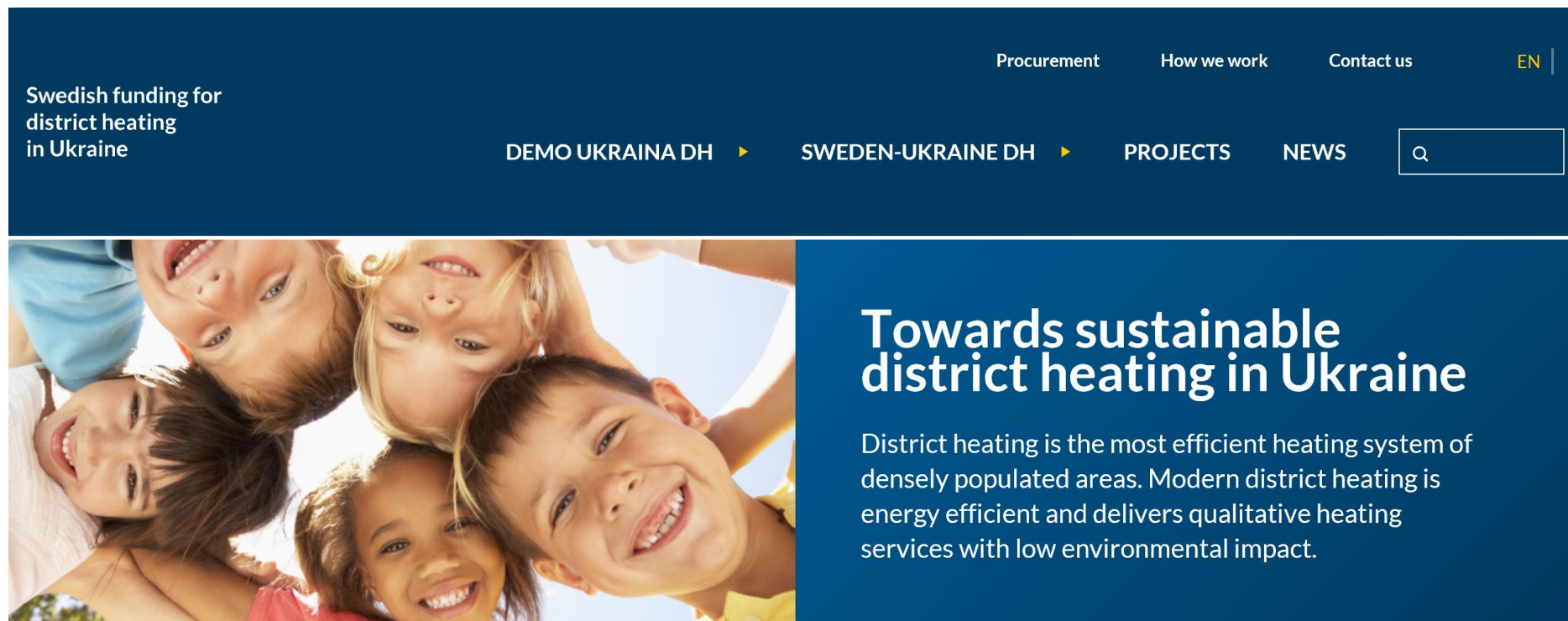
Project financing

- NEFCO Loan – up to 5 MEUR
- Sweden Grant – maximum 1.5 MEUR up to 30 % of external funding
- Project owner (municipal DH company) – minimum 10 % of the project budget
- Technical assistance for project preparation and implementation will be provided, financed by Sweden
- Projects to be approved by NEFCO BoD
- NEFCO funds can not be used on measures, which could be considered to lead to fossil fuel lock-in effects

Examples of project financing structure

Example NN	Loan [MEUR]	Grant [MEUR]	External funding [MEUR]	Co- financing (minimum) [MEUR]	Project Budget [MEUR]
A	5,0	1,5	6,5	0,65	7,15
	77%	23%			
B	4,5	1,5	6,0	0,60	6,60
	75%	25%			
C	3,5	1,5	5,0	0,50	5,50
	70%	30%			
D	2,8	1,2	4,0	0,40	4,40
	70%	30%			

Programme web site: dh-ukraine.nefco.org



dh-ukraine.nefco.org

