



# Thermomodernization of the House of Social Care „Mors” in Stegna

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Building located in Stegna, at Morska Str. was constructed in 1974-1980

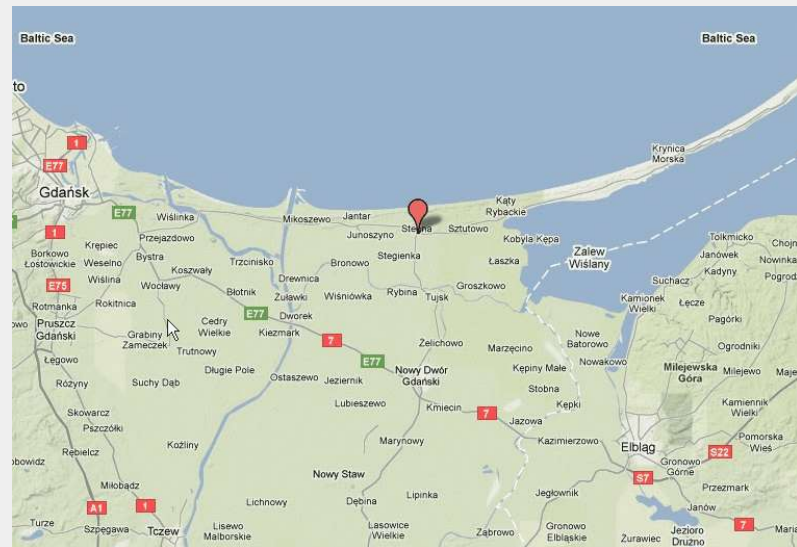
4 – stories building consists of:

- living part (70 rooms)
- rehabilitation part (15 gabinetów zabiegowych)
- dining room and kitchen
- leisure part (coffeteria, meeting room, library)

Usable area – 5 370 m<sup>2</sup>

Heated space - 14 627 m<sup>3</sup>

Heating source : 4 coal boiler of total capacity 1,016 MW



## Project development

1. Energy audit
2. Application to Norwegian Financial Mechanism by County Nowy Dwór Gdański
3. Own financial sources
4. Supplementing source up to 100% of investment costs
5. Additional to thermomodernization – general retrofitting works inside the building
6. Construction phase
7. Reports and monitoring

Before thermomodernization



### Scope of the works:

- Exchange of windows – 1 010 m<sup>2</sup>
- Insulation of walls – 1 944 m<sup>2</sup>
- Replacement of coal boilers by pellet boilers of 300 kW capacity
- Installation of solar collectors – 200 m<sup>2</sup>



Effects :

- Decrease of heating demand from 7 622 GJ/year to 2 654 GJ/year
- decrease of heat for h.t.w. from 2 678 GJ/year to 1 293 GJ/year
- emission reduction

Emission	Reduction %
SO <sub>2</sub>	<b>95,2</b>
NO <sub>2</sub>	<b>6,9</b>
CO	<b>94,3</b>
CO <sub>2</sub>	<b>99,9</b>
pył	<b>100,0</b>
B-a-P	<b>100,0</b>

Investment cost:

1. Norwegian Financial Mechanism	- 2 100 tys.zł
2. WFOiŚ Gdańsku (donation)	- 340 tys. zł
3. WFOiŚ Gdańsku (loan)	- 1 360 tys. zł
4. National Rehabilitation Fund	- 400 tys. zł
5. Own sources of Nowodworski Powiat	- 1 864 tys. zł
<b>Total</b>	<b>- 6 064 tys.zł</b> <b>(ca.1,5 mln Euro)</b>





## Conclusions:

- Improved comfort
- Reduced energy demand
- Reduced emission
- New experience – utilisation of external financing
- New image of DPS

Thank you for your attention!