Nova Odesa city
territorial community

INSTALLATION OF A SOLAR POWER PLANT IN THE CITY OF NOVA ODESA

Total power: 500kW

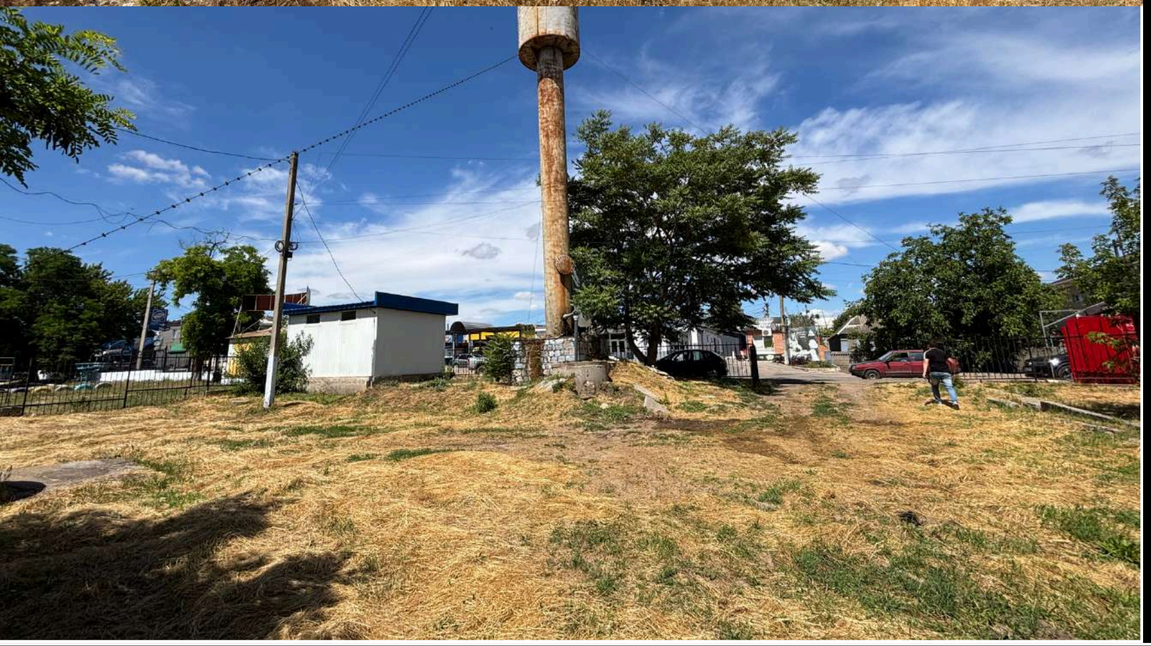
1. GENERAL INFORMATION ABOUT THE PROJECT

Title: Construction of a Solar Power Plant (SPP) at the Main Water Intake Facility

Location: Nova Odesa, 22 Dachna Street

Capacity: 500 kW

Client: Nova Odesa City Territorial Community



2. PROJECT GOALS

- Ensure energy independence of the water intake facility
- Reduce electricity costs
- Enhance environmental sustainability and reduce CO_2 emissions
- Provide stable water supply during emergencies

3. RELEVANCE OF IMPLEMENTATION

- Frequent power outages
- High cost of energy resources
- The water intake supplies drinking water to thousands of residents
- Need for an autonomous and backup power source

TECHNICAL SPECIFICATIONS OF THE SPP

- Capacity: 500 kW
- System type: Ground-mounted, fixed structure
- Estimated area: up to 1 hectare
- Number of panels: ~1,100 units (450–500 W each)
- Inverters: Three-phase with monitoring system
- Recommended battery storage:
  - Capacity: 500–800 kWh
  - Inverter power: 100–200 kW
  - Type: Lithium iron phosphate ($LiFePO_4$)
- Intermediary energy transfer: Use of buffer batteries for energy balancing during peak consumption hours
- Technical conditions: To be obtained by the client from Mykolaivoblenergo in accordance with the current procedure for grid connection

5. EXPECTED RESULTS

- Up to 100% electricity coverage of the water intake needs during sunny periods
- Annual savings of up to UAH 3 million
- Reduction of CO_2 emissions
- Contribution to the community’s green transformation
- Backup power supply during outages or emergencies

6. ESTIMATED PROJECT BUDGET

Category	Estimated Cost (UAH)
Design & planning	500,000 – 700,000
Equipment	8,000,000 – 9,500,000
Installation & commissioning	1,500,000 – 2,000,000
Monitoring & control systems	200,000
Battery storage (500–800 kWh)	6,000,000 – 12,000,000
Other (security, landscaping)	300,000 – 400,000
Total	UAH 16 – 24 million

7. FUNDING SOURCES

🤝• State energy efficiency programs

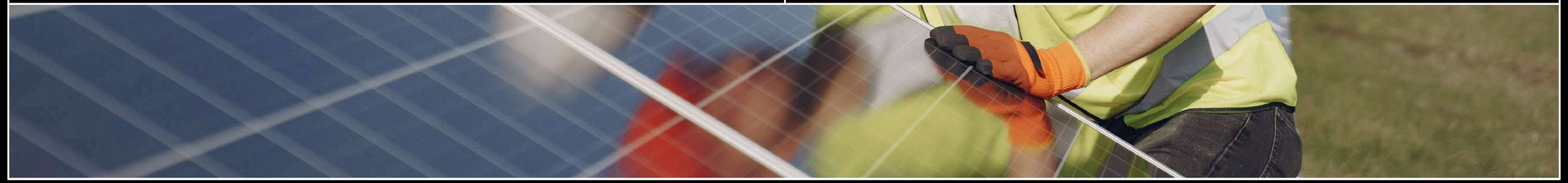
• International donors (EU4Energy, GIZ, NEFCO, E5P)

• Local budget / co-financing

• Green loans from banks

8. IMPLEMENTATION TIMELINE

- Preparation, documentation, tenders — up to 8 months
- Installation and commissioning — up to 7 months
- Total duration: ~15 months



9. Contacts

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Committed to building strong and effective cooperation!