

Project Profile Sheet

Name of the Organisation	Ship Design and Research Centre	
Organisation Type	Research Institute	
Contact Person	Sebastian Kowalczyk	Position: Head of Analyses Group
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Address	Szczecinska 65 80-392 Gdansk, Poland	
Fields of Activity	Design and model testing of ships, yachts and off-shore structures, industry, renewable energy facilities design and investigation, marine environment protection.	
Skills and Expertise Offered	Ship model testing in deep and shallow water, hull form and ship propulsors design, seakeeping and manoeuvring model tests, cavitation tunnel testing, wind engineering, experimental fluid dynamics, CFD, FEM analyses of ship and offshore structures, noise and vibration prediction and reduction methods, research on renewable energy facilities including aerodynamic model testing, offshore structures experiential investigation, innovative materials research, marine environmental research including ballast water monitoring and treatment methods, ship design, sea trials and ship on-board measurements.	

Project Proposal Title	Green and silent water tramway for highly populated urban agglomerations of Eastern Europe
Project Proposal Acronym	ECOTRAM
Topic(s)	SST.2012.1.1-2, SST.2012.2.2-1, SST.2012.5.2-3
Abstract	The project intends to elaborate a series of water tramways , different in size, dedicated to restricted waters of highly populated agglomerations of Eastern Europe. Such tramways to be distinguished by modular economic power plant fed by innovative, renewable electric energy sources similar to land

Supporting Organisations:-



	means of transport. Their hulls, with limited draughts and maximized payloads will be propelled by up to date electric propulsors with very low noise levels. Hull forms to be hydrodynamically perfected so as to achieve very high operational efficiency with minimized wash impacts and high safety levels. Innovative construction materials to be used for tramways manufacture. Elaborated tramways to be easy for manufacture and servicing for inland SMEs. Generally, they are intended not only for people's transport but for the post and valuable goods delivery to versatile, different in size, inland terminals as well and good cooperation with land means of transport.
Main Work Packages	<ol style="list-style-type: none"> 1. Review of available renewable energy sources. 2. Review and selection of feasible electric propulsors. 3. Analysis of potential routes, completion of design requirements . 4. Review and selection of innovative construction materials. 5. Elaboration of alternative conceptual designs. 6. Multidirectional hydrodynamic optimizing investigations. 7. Complex economic analyses and selection of the most encouraging concepts. 8. Elaboration of complex technical documentation with respective performance predictions.
Current Consortium (Partners, Organisation Types)	Ship Design and Research Centre as co-ordinator (person to contact: jam.kanar@cto.gda.pl)
Partners Required	ship designers, hydrodynamicists, material specialists, producers of land means of transport

Supporting Organisations:-

