



PUHDAS ITÄMERI JOHN NURMISEN SÄÄTIÖ

## Fund Report

1/2014 (17.4.2014)

Status as of 31 December 2013	€
<b>Donations</b>	MEUR 10.3
<b>Expenditure</b>	MEUR 7.6
<b>Commitments</b>	MEUR 1.8

### Objectives of the Clean Baltic Sea projects

The Clean Baltic Sea projects of the John Nurminen Foundation focus on two areas of operation: projects that aim at reducing phosphorus discharges and preventing eutrophication, and the Tanker Safety project, which promotes the safety of oil traffic in the Gulf of Finland. The eutrophication projects are managed by Marjukka Porvari, and the Tanker Safety project by Pekka Laaksonen. All in all, the projects and their support activities employ nine people, two of them part-time.

**The target of the eutrophication projects is to reduce the annual phosphorus load to the Baltic Sea by a total of 2,500 tonnes.** Eutrophication projects are currently ongoing at 11 project targets, and at eight sites the projects have already been completed. Moreover, the John Nurminen Foundation has provided technical expertise to two project sites, thereby contributing to the reduction of phosphorus discharges. The wastewater treatment plants of project cities seek to improve the efficiency of phosphorus removal so that the amount of phosphorus in wastewaters that leave treatment plants does not exceed 0.5 mg/litre; this also corresponds to the wastewater treatment levels recommended by the Baltic Marine Environment Protection Commission HELCOM.

**The Tanker Safety project reduces the risk of major oil tanker accidents in the Gulf of Finland significantly** through the development and deployment of the ENSI navigation service. The service improves information exchange between the vessel's bridge and marine traffic operators, and improves the preconditions of proactive traffic control. Marine traffic control receives information on the vessels' precise route plans, and the tankers receive valuable route-specific navigation information via the ENSI portal. The Finnish Transport Agency is the project's main partner. The Foundation intends to detach from the project when a mechanism that will ensure the proliferation of ENSI amongst tankers in the Gulf of Finland has been established.

### Eutrophication projects

Investment plans and investment contracts, concluded between the Foundation and water utilities for the construction of phosphorus removal systems at the wastewater treatment plants of Gatchina and Vyborg in North-Western Russia have now been completed. The Gatchina project is currently applying for official registration from the Russian authorities, as this would enable customs and tax

free equipment deliveries. The Vyborg project has been delayed due to personnel and organisational changes at the Vyborg water utility, and the breakdown of a sewage header pipe. In February 2014, a new header pipe was inaugurated in Vyborg, enabling the phosphorus removal project to move forward. In both cities, the goal is to initiate chemical phosphorus removal in the autumn of 2014. With the implementation of these projects, the annual phosphorus load entering the Gulf of Finland from Gatchina is reduced by 40 tonnes, and that from Vyborg by 20 tonnes.

The two Clean Baltic Sea projects, PURE and PRESTO, through which the Foundation carries out investments that improve the efficiency of nutrient removal, are partially financed by the EU's Baltic Sea Region Programme. The PURE project (Project on Urban Reduction of Eutrophication) improved the efficiency of phosphorus removal in the wastewater treatment plants of Belarus, Poland, Latvia and Estonia. All PURE project investments were completed in September 2013, when the wastewater treatment plant of Brest deployed the first chemical phosphorus removal system in Belarus. After the closure of the PURE project, the Foundation continues to cooperate with the Brest water utility in order to improve the management system of the phosphorus removal process. The PURE project resulted in a reduction of 300–500 tonnes in the annual phosphorus load.

The PRESTO project (Project on Reduction of Eutrophication of the Sea Today) invests in improving the efficiency of nutrient removal in the three Belarusian cities of Grodno, Vitebsk and Molodechno. The water utilities signed equipment delivery agreements in the summer of 2013. Construction and equipment installation at the treatment plants began in the autumn of 2013, and will be completed by September 2014. Preliminary evaluations indicate that the PRESTO investments will reduce the phosphorus load entering the waterways from these wastewater treatment plants by as much as 500 tonnes.

The total budget of the PRESTO project is €4.55 million, of which investment to wastewater treatment plants accounts for €2 million. EU's Baltic Sea Region Programme funds the majority of the project, bearing 75-90% of the project partners' project costs (depending on the country where the partner operates). Moreover, the Finnish Ministry of the Environment supports Finnish project partners with a sum that covers the majority of their own costs.

In May 2012, the Baltic Sea Action Plan Trust Fund granted financing for the Foundation's project with the Udarnik poultry farm, where the goal is to reduce the nutrient loads discharged to the Baltic Sea from the leaking manure pools in the farm's area. An investigation into improving manure treatment at Udarnik, located in the Vyborg region, was completed in the summer of 2012. Udarnik built a new manure pool in the autumn of 2012, and has initiated the planning of two new manure pools. During 2013, the Foundation and the owners of the Udarnik poultry farm joined forces to investigate the options of minimising the risk of leakages to the environment from the old and new manure pools. In 2014, the farm will be equipped with a filtering system that can be used to treat the runoff waters from the manure pools, thus preventing nutrient discharges to the nearby waterways.

The estimated annual phosphorus discharges of 1,000 – 2,000 tonnes from the Phosphorit fertilizer factory in Kingisepp by the River Luga to the Gulf of Finland were brought under control after experts built a runoff water treatment system in the area in March 2012. In June 2012, the Foundation and the factory's owner, EuroChem, signed an agreement on commissioning an independent expert body for the purpose of assessing the effectiveness of the treatment system

and monitoring phosphorus discharge trends in the River Luga. In the summer of 2013 Atkins, an international consultancy was chosen for the task, and work began in September 2013. The Foundation monitors Atkins' work by participating in practical implementation and by joining the steering group to which Atkins reports its results. The first samples were taken from the River Luga in October 2013, and the results were published in early 2014. Results indicate that the phosphorus levels of the River Luga have remained on the same low level that was reached when the treatment system was deployed. Atkins' monitoring and assessment task will continue until the autumn of 2014.

In the spring of 2013, alarmed by the Kingisepp phosphorus leak, the Foundation commissioned a report on the risks associated with the fertilizer industry of the Baltic Sea region; this report was presented as background material in the HELCOM meeting of June 2013, which dealt with discharges to the Baltic Sea from the fertilizer industry. The report indicated that gypsum piles, in particular those on the coast of Poland, may be the source of phosphorus and other harmful substances entering the Baltic Sea. The Foundation is active in monitoring measures that prevent discharges from the Gdansk and Police gypsum piles to the environment and the Baltic Sea.

### **Tanker Safety project**

The final owner of the ENSI (Enhanced Navigation Support Information) navigation service, developed by the project, is the Finnish Transport Agency, which is also responsible for the implementation and further development of the service. John Nurminen Foundation's role in the project was to lead ENSI specification work, and to bring together various stakeholders in order to accelerate service creation and deployment. The Foundation continues to work with the latter task.

The project is now the responsibility of the Finnish Transport Agency. In September, ENSI was presented at IMO's NAV subcommittee meeting together with other Nordic eNavigation projects.

In December, the Foundation and the Finnish Transport Agency concluded a cooperation agreement defining the work division required for the completion of the project. At the same time, the project was expanded to cover not just tankers but also other vessel types. Deployment will continue in 2014.

### **Fundraising**

The Clean Baltic Sea projects are funded with private donations and public financing. In 2013, proceeds from Clean Baltic Sea project fundraising totalled at slightly above €1.3 million. Companies accounted for approximately 39% of the donations, the public sector for roughly 33%, and donations from private individuals amounted to 28%.

New kinds of fundraising campaigns were established in 2013. Profits after expenses from the first Clean Baltic Sea concert, organised in February 2013, amounted to more than €50,000. Also initiated in the spring was the Horizon campaign: kicked off in connection with The Tall Ships Races Helsinki 2013 and aimed at private individuals, campaign participants receive a steel plate

bearing their name in the *Horizon* work of art, built in the Jätkäsaari pier. The Horizon campaign continues in 2014.

The Christmas campaign, aimed at companies, managed to raise more than €70,000 around the turn of the year. The largest Christmas donors were Familjen Hartwalls Fond and Greta Maria Lindbloms Stiftelse.

By 31 December 2013, funds raised amounted to a total of approximately €10.3 million, of which roughly €7.6 million has been used in project funding. Commitments, i.e. the sum currently reserved for ongoing and planned projects, amount to €1.8 million. The sum reserved for commitments depends on project schedules. According to a decision by the Board of Directors, commitments must not exceed the amount of funds raised.

At the moment, funds are being raised in order to reach the Eutrophication Project target of a 2,500-tonne reduction in phosphorus load, of which 400 tonnes are still missing, and for the purpose of identifying various project targets which can secure the declining trend in nutrient discharges to the Baltic Sea also in the future. The estimated need for funding exceeds €2 million, but the amounts will be more exact after project targets have been identified.

*Annamari Arrakoski-Engardt*  
Secretary General  
John Nurminen Foundation