

Saving Endangered Freshwater Pearl Mussels in Finland



Project Duration: 1 year

The endangered freshwater pearl mussel famously lives to over 200 years old. EKOenergy funded 9,000 € to a mussel rehabilitation project in the University of Jyväskylä, to save the last surviving populations in southern Finland.

Freshwater pearl mussels (Margaritifera margaritifera) are an important indicator species in river ecosystems. As filter feeders, they help to keep the river water clean. These mussels are unique both for their long lifespan and for their life cycle, which is dependent on the migration of salmonid fish. In the first stage of reproduction, mussels produce millions of progeny called glochidium larvae, which bind to the gills of fish and live there for 10 - 11 months.

Declining salmonid populations, along with rising water pollution and silt build-up in rivers has been devastating for freshwater pearl mussels. Populations have declined globally by 61.5%, and by 81.5% in Europe, over the past 90 years.

"In southern Finnish rivers, at river Mustionjoki, for example, we found that these old mussels were in very poor condition and they did not produce glochidium larvae anymore," says Jouni Taskinen, a professor at the University of Jyväskylä. "In practise, this means that we have lost the population".

In 2017, the EKOenergy environmental fund gave 9,000 € to support a mussel

restoration project in southern Finland headed by Jouni Taskinen. Mussels from river Mustionjoki were brought to a restoration facility in Jyväskylä, where they were maintained in clean water sourced from the Konnevesi national park.

"In the first year there was some mortality, but the condition of the mussels improved. In the second year, mortality went down and they started to release glochidium larvae. This is a real breakthrough in the conservation of freshwater pearl mussels".

> Despite the fact that these mussels had likely not been reproducing successfully for decades, Taskinen's group has demonstrated that with focussed effort, even mussels considered dying can be saved. Taskinen's work demon-

strates that this can be repeated wherever mussels are struggling in the world. The challenge now is to clean up our rivers to allow these ancient mussels to return and thrive in their natural habitat.

"I think there's hope for freshwater pearl mussels. The good thing is that they are so long lived so, in a way, it's a very nice species because they will forgive you".

Text: Cameron Boggon Photo: Professor Jouni Taskinen

ENVIRONMENTAL FUND



EKOenergy funds river restoration projects annually



Projects implemented by trustworthy local organisations



Projects selected by independent jury of experts



In 2017, EKOenergy donated 77,000 € to 4 projects



Funding comes from sales of EKOenergy ecolabeled hydropower

EKOenergy - the international ecolabel for renewable energy

EKOenergy is the international ecolabel for energy. We are a nonprofit ecolabel, supported by a growing international group of over 40 environmental organisations.

EKOenergy not only excludes fossil fuels and nuclear power, but demands strict sustainability criteria for renewable energy production. We also support new renewable energy production through our Climate Fund.

Ecolabelled electricity is available for all types of organisations and international corporations. It is a cost-efficient way to reduce your organisation's carbon footprint and communicate about your choice by using the well-known ecolabel.

EKOenergy users include large international businesses such as Yves Rocher, SAP, VMware, Genelec and L'Oréal, as well as cities and other public organisations.



Sustainability criteria: additional value for our planet

	EKOenergy	Other renewable	Mixed sources
New renewable energy production via our Climate Fund	\checkmark	?	-
Only the most climate friendly bioenergy	\checkmark	?	-
Wind power outside bird and nature areas	\checkmark	?	-
Hydropower takes into account migratory fish. River restoration projects via our Environmental Fund.	\checkmark	?	-
Renewable energy tracked by GOs, RECs, I-RECs	\checkmark	\checkmark	-
Wind, solar, hydro, geothermal, bioenergy	\checkmark	\checkmark	?
Fossil fuels, nuclear, possibly renewables	_	-	\checkmark

Endorsed by other standards

EKOenergy is mentioned by the most well-known international environmental standards, such as Greenhouse Gas Protocol, Greenkey for hotels and LEED-certification for buildings.

"EKOenergy represents the best available option for the sustainable and additional consumption of renewable electricity within Europe."



"Ecolabels are a way for companies to do more with their purchases. EKOenergy, mentioned by the GHG protocol Scope 2 guidance, is such an option: it is a mark of quality which comes on top of tracking certificates."



"A growing number of hotels in Europe have already switched to EKOenergy and include the EKOenergy logo in their communication with their guests. Follow their lead and go the extra mile."



