

ENERGY BARGE

Newsletter #19



Source: Port Authority Vukovar

Welcome to the 19th newsletter of the ENERGY BARGE project!

In the course of the ENERGY BARGE project, our partners from the logistics sector prepared pre-feasibility studies to define development plans and investment needs required to strengthen Danube ports as logistics hubs for the bioenergy sector. In this issue, the study conducted by the Port Authority Vukovar to evaluate the establishment of a biomass trade centre at the port site is presented.

Further, we would like to take this opportunity to kindly invite you to register for the ENERGY BARGE business-to-business meeting on 5 February 2019 in Vukovar, Croatia.

We hope you enjoy reading!
The team of ENERGY BARGE



The partners

There are 15 partners
involved in the project
from 7 countries:

7 partners from the biomass/bioenergy sector

6 partners from the logistics sector
including 5 ports

3 partners from the field of research
that provide either special knowledge
needed for the implementation of the
project (spatial modelling) or who have
special knowledge and networks in
their regions (biofuels and biomass).



Pre-feasibility study Port of Vukovar

The port area of Vukovar port is managed by the public institution Port Authority of Vukovar (Lučka uprava Vukovar). Current cargo transshipment in the port of Vukovar comprises several types of cargo, but rarely includes biomass. Hence, the ambitious goal of the pre-feasibility study was to assess the possibilities of transforming the port of Vukovar into a biomass hub.

Results show that the market for biomass and processed products is under continuous development. That makes the Croatian market for biomass from forests unique is that Hrvatske šume d.o.o. (Croatian Forests Ltd.) is by far the largest supplier. This market position would make Hrvatske šume d.o.o. a strong strategic partner in the project. Data on regional biomass market prices indicate that establishing a biomass trade centre primarily for pellets and wood chips at Vukovar port would be an economically viable option. The Slavonia and Baranja area is the area in Croatia with the highest potential for biomass production. Yet, there is not any biomass trade centre located in the area. The geographic position of the Vukovar port is very favourable for the establishment of such a centre.

The existing infrastructure and technical conditions in the port of Vukovar are sufficient and present concessionaires could carry out the transshipment and storage of biomass and biomass products. Yet, local transport is carried out by trucks and the volumes for international trade suitable for inland waterway transport (IWT) are too small. Setting up a biomass trade centre could result in a reduction of shipping costs and subsequently make IWT more attractive.



Source: Port Authority Vukovar

Furthermore, it would stimulate the development of the biomass market in the region. In the near future an increasing number of power plants that use or plan to use biomass will generate a high demand for improved biomass logistics. Hence, the biomass trade centre would serve two functions: as a terminal specialised in the transshipment and storage of biomass and biomass products, as well as a market for traders and customers from the greater surrounding area.

The centre would initially supply energy wood (chips and logs). The product range could be extended to wood pellets and other agricultural products. Potential stakeholders who are interested in the establishment of the centre were identified: Hrvatske šume d.o.o. and Spačva d.o.o. as suppliers of biomass, the leading company for inland waterway transport Dunavski Lloyd, and Luka Vukovar d.o.o., a current concessionaire of the port.

The restructuring of Vukovar port should be realised in three phases:

1. Enhancing the port infrastructure to serve its new purpose (expanding the quay, adding a railway connection, new crane, etc.).
2. Issuing a concession for the establishment of a biomass trade centre and the selection of concessionaires.
3. Establishing a biomass trade centre, which would be the investment of the future concessionaire.

According to the proposed plan, the required investment by the Port Authority and the future concessionaire adds up to approx. 7.2 million €. The new infrastructure would make up about 65% of the investment, while the new equipment would amount to 35% of the investment. The initial investment is planned to be completed during the period 2019–2021.



The commercial investment period (business operation period) is 27 years. A total of around 126,000 tonnes of forest biomass are expected to be traded through the new biomass trade centre annually. The costs for operation and maintenance of the port infrastructure were analysed through two scenarios: business as usual and implementation of the project in order to assess the actual impact of the project on the future operation of the Vukovar port.

Through the financial analysis, the project's profitability was considered, project sustainability and feasibility were verified, and a projected cash flow that includes socio-economic costs and benefits was generated. While the return on investment for the project is projected to be negative during the investment period, further analysis shows that returns to the national economy outweigh these losses.

Special attention was given to the possibility to cooperate with other Danube ports. Considering the existing biomass resources in the greater area of the Vukovar port (300 km radius), the cooperation with ports in Hungary (Baja and Mohacs) and Serbia (Pančevo, Novi Sad and Belgrade) is most probable due to traditional business relations. However, cooperation with ports in Romania (Constanza) and Bulgaria (Vidin) at the lower section of the Danube and the port of Krems (Austria) at the Upper section of the Danube are also possible.

The full study can be accessed via this [link](#).

B2B meeting on bioenergy logistics in Vukovar

On 5 February 2019, the fourth ENERGY BARGE business-to-business meeting will be held by our project partner Port Authority Vukovar in Vukovar, Croatia.

The aim of the business-to-business meeting is to provide a platform for know-how exchange and for establishing new business contacts. The event will offer a favourable framework for strengthening the Danube as a logistics axis for biobased cargo. Site visits at the Port of Vukovar and the wood processing company Spačva in Vinkovci will conclude the workshop.

Participation in the business-to-business meeting and the site visits is free of charge, but registration is obligatory. **Please register by 30 January** via e-mail: rsimunovic@drvniklaster.hr. Please see the [agenda](#) for further information. The event will take place at the Hotel Lav Vukovar, J.J. Strossmayera 18, Vukovar.

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