Kirill Abrosimov / Alexandra Sveshnikova / Maksim Glagolev (PhD students, Skoltech)

Preliminary Feasibility Study "Energy Bridge Russia-Japan". Project review.

Abstract. Japan is still in a very difficult situation because of the Fukushima disaster. A number of forces within the country are lobbying for different pathways for the country's development. Decisions have to be made around major questions: shall we reactivate nuclear? Will we have to buy LNG constantly? Are renewables able to meet the demand? What other factors adversely affect our energy security?

«Energy Bridge Russia-Japan» Project has a goal to understand the actual situation in Japan and evaluate technical and economical worthiness of connecting with Russia via a power cable energy bridge system. The main contractor is one of the biggest Russian energy companies - RAO ES East which has the ambitious plan of diversifying its business abroad.

The project was mainly developed by Skoltech Energy Systems CREI. Our group started work on the project in the fourth quarter of 2015. The results of our studies are currently under review of the main contractor – RAO ES East. The Report includes 6 chapters:

1. Japan Energy System Analysis;
2. Japan Energy Sector development evaluation;
3. Potential partners;
4. Technical Analysis of Project realization;
5. Economical Analysis;
6. Risk Analysis - Technical and Economical risks description.

Bio. **Kirill Abrosimov**

Kirill graduated from Bauman University in 2014 majoring in alternative energy plants and gas turbines. He also worked on solar energy theme project. His diploma work was dedicated to small modular biogas station with a gas turbine of non-conventional thermodynamic cycle as power machine. At Skoltech Kirill's focus of research is studying mechanical part of energy systems.

Aleksandra Sveshnikova

Education: Chemical engineering (Bachelor degree at Gubkin State University of oil and gas), Sustainable Energy Engineering (Master degree at Royal Institute of Technology, KTH Stockholm), Energy Engineering for gas transport systems (Master degree at Gubkin State University of oil and gas)

Research interests: Renewable energy, Smart grid systems, Fuel cell technology, energy efficiency.

Maxim Glagolev

Maxim graduated from National Research University "Moscow Power Engineering Institute", TMPU department (Heat and mass transferring processes and installations). He also has secondary high education in economy field: "Economy and management in power industry" specialty. Maxim has a professional experience in the fields of energy audit and organization/management of the private company's department.