

UNIVERSITY OF BELGRADE

Faculty of Political Sciences

Belgrade, September 2019

At the meeting of the Department of International Studies, held on 16 May 2019, the Master Thesis Defense Commission (hereby the Commission) for the candidate Svetlana Tyutyunnikova was formed with the following members: Prof. dr Darko Nadić, doc. dr Aleksandar Milošević and prof. dr Nemanja Džuverović. The Council for the Second and Third Cycle of Studies has accepted the proposal made by the Department.

After reading the master thesis, the Commission is submitting the following report.

R E P O R T

The master thesis of Svetlana Tyutyunnikova entitled "The Role of Energy Resources in Sustainable Human Development" is comprised of three chapters next to the Introduction, the Conclusion, and the list of references. The main aim of the thesis was to show how current trends in energy sector, such as shift from traditional fossil fuels to renewables, energy efficiency growth and regulations pertaining climate change, affect sustainable human development and peace. The work also raises the issue of geopolitical impact of development and distribution of energy resources in the world today and in foreseen future, and its role in global peace as a part of development agenda. In her thesis, the author presented connections between global energy resource trends and global problems they cause and solve, and advocated the importance of new ways of action according to sustainable development agenda.

For research purposes, quantitative analysis of official statistics and data was used to depict the level of realization of sustainable development goals related to energy together with current trends in energy resources exploration, distribution and use worldwide. Data was taken from the following sources: World Bank, International Energy Agency, other public statistic databases, as well as official business reports on energy development made by corporate entities. Comparative method showed interdependence between energy sector operations and economic development, political situation and social tensions in particular regions. The secondary analysis of data collected by other researchers and case studies available in academic literature was also important for this work and presented new linkages through the amount of academic data and case studies on these topics.

Theoretical framework is divided into three parts: first one is devoted to energy resources production and use in modern world; second part is related to conflict and peace framework of energy resources development; third part describes sustainable development agenda. In the first part the history and modern era of energy consumption and use are shown, together with different scholars' views on future forecast of world energy sector development. Some researchers all over the world are being skeptical about the possibility of successful achievement of sustainability of energy supply and use in the near future. Others believe in transformative potential of moving away from fossil fuels and major transition to low-carbon economy, despite economical and environmental challenges. The theories were compared with assumptions based on International Energy Agency and certain extractive companies' reports, which show modern trends in the industry in accordance with current technical limitations. This part also shows a problem of energy resources production and its relations with other global problems of our time, as well as common academic knowledge in this field.

The second part gives a review of recent research devoted to conflict and peace framework of energy resources development. Works of various authors cover the topic of natural resource relation to conflict, peace and institutional stability of countries. The academic articles show that energy resources as one of the main commodities and economically valuable assets play a significant role in global politics. At the same time, cross-country evidence presents different results of this influence, depending on institutional stability, political regime and rent distribution mechanisms. According to various research, resource abundance may be the fuel for intra- and interstate conflicts, or, on the contrary, spare the country from internal disputes and maintain peace.

The third part is dedicated to sustainable development agenda. It gives a brief outlook to the creation of Sustainable Development Goals (SDGs), their academic basis, implementation and current progress assessment worldwide. The particular attention is paid to sustaining peace as a part of the agenda and interdependence between peace and development.

Empirical section contains the research on influence of energy resources on sustainable human development measured by sustainability indicators and the role of energy sector for geopolitics, conflict and peace. The first section presents the progress in achieving development goals in energy and their importance for prosperity of nations. The cross-country data of the World Bank describes completion of the following energy related Sustainable Development Goals and tasks: access to energy, climate action and switch to renewable energy sources, energy efficiency. Substantial worldwide progress has been achieved recently in providing access to energy and improving energy efficiency. However, according to the

data, greenhouse gas emissions and climate change are still the major problem, even taking into consideration the growing share of renewable non-carbon sources in global fuel mix.

The second section addresses the geopolitical processes related to energy sector trends, such as the resource curse paradox and ways of avoiding it, globalization and cooperation in the field and particular role of multinational corporations. Special attention is paid to energy resources influence on conflict and peace, as well as their potential for peacebuilding. Several case studies are presented in the light of a relatively new field of academic research named Business for Peace, which seeks for potential peace-positive influence of business activities. Presented cases, taking context into consideration, confirm the hypothesis that promise of economic benefits and development opportunities provided by energy resource exploration and production may become consolidating factor for sustainable peace in fragile and post-conflict contexts. Investments in energy projects may encourage dialogue between stakeholders, provide “peace dividends” and significantly increase the cost of conflict, preventing it to relapse. On the other hand, development of renewables puts expectations on energy sources redistribution as a boosting factor for economic growth and political independence of underdeveloped regions. Therefore, energy transition is shown in the light of its potential to reduce political tensions and create preconditions for sustaining peace.

In discussion section new opportunities and potential of energy sector transition and transformation are presented based on the research conducted as well as risks and open questions of current strategies in energy sector in terms of sustainable development. Innovative approach and technological improvements in the field of energy sector have potential to provide preconditions to achieving the Sustainable Development Goals related to energy and other areas. Positive shifts in energy production, distribution and use are crucial for economic growth, natural and human capital of countries, sustaining peace and international cooperation. At the same time, a long term priority of the global energy strategy should be minimization of economic, social and environmental risks, most of which are interdependent and systematic.

The Commission is convinced that the candidate Svetlana Tyutyunnikova has shown deep understanding of the nexus between sustainable human development and positive peace. Also, the Commission is satisfied how the candidate has applied theoretical concepts in the empirical part of the paper. Based on this, the Commission concludes that the master thesis "The Role of Energy Resources in Sustainable Human Development" by Svetlana Tyutyunnikova fulfils all the formal criteria for the public defence.

The Commission:

Prof. dr Darko Nadić

Doc. dr Aleksandar Milošević

Prof. dr Nemanja Džuverović