Transformation of the Russian Far East's energy sector against the backdrop of the global energy transition: role of the institutions

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Abstract. *The article examines the transformation processes of institutional environment that shape the development of the Russian Far East's energy sector under the global «green» energy transition. It is portrayed that the key relevant legal norms were adopted in 2020–2021; therefore, they have not yet affected the sectoral and production proportions of the energy sector. Two promising technological direc-tions are identified that form the material basis for the energy transition in Russia: power generation based on renewable energy sources (RES) and hydrogen tech-nologies. It was revealed that electricity market segments and territories highly dif-ferentiate in terms of the state support for developing RES. Shortcomings of the mechanisms of RES state support for each segment of the market and territories are identified, and their evolution over time is displayed. The development of hydrogen technologies is at the initial stage: the regulatory and legal framework has been formed, and the scientific and technological potential has been consolidated. The current development model of the energy sector of the Far East of Russia is characterized, and the conditions for its transformation against the backdrop of the global energy transition are analyzed. It has been determined that the most effective state support measures do not cover most of the territory of the Far East. As such, the prospective share of RES in the generation mix of the majority of the Far Eastern regions of the Russian Federation will not exceed 1%. Conditions for hydrogen production in the regions of the Russian Far East are analyzed and competitive advantages, barriers and threats are determined.*

Keywords: *hydrogen technologies, renewable energy sources, global energy transition, the Russian Far East, institutional conditions, energy sector, energy efficiency*

For citation: Dyomina O. V., Gulidov R. V. Transformation of the Russian Far East's energy sector against the backdrop of the global energy transition: role of the institutions // Power and Administration in the East of Russia. 2022. No. 4 (101). Pp. 15–31. https://doi.org/10.22394/1818-4049-2022-101-4-15-31