

Analysis of Foreign Experience in Improving Eco-Friendliness of Transport Services

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key words

eco-friendliness, transport, strategy, efficiency, organization, targets

All over the world, railway companies are adapting to changing demands, in which the fight against climate change, environmental friendliness and sustainability are at the forefront. We have analyzed the approaches to the development and implementation of environmental strategies, international experience in achieving environmental goals in the areas of strategies of the world's leading railway companies. We have identified areas for improving the environmental efficiency of production processes. Of the unrealized technologies, emission reduction systems for existing locomotives, as well as noise reduction systems at the source for new and existing non-traction rolling stock are of interest to the Russian company.

Also, the results of environmental protection activities and the level of achievement of target indicators for various railway companies were compared. Based on the data obtained, a comparative analysis of the most notable technological solutions of a number of foreign companies is presented, broken down by the main target areas for the implementation of the environmental strategy.

References

1. Environmental strategy of JSC Russian Railways for the period up to 2020 and perspective up to 2030; <https://company.rzd.ru/ru/9353/page/105104?id=958>.
2. Kuzina E.L. Osnovy upravleniya razvitiem ekologo-ekonomicheskoy sistemy prirodopol'zovaniya na zheleznodorozhnom transporte [Fundamentals of managing the development of the ecological and economic system of environmental management in railway transport], *Inzhenernyy vestnik Dona*, 2011, no. 3, pp. 348–356.
3. Galkin V.A., Kuzina E.L., Tagil'tseva Yu.A. Teoreticheskie osnovy povysheniya ekologichnosti proizvodstvennykh sistem [Theoretical foundations for improving the environmental friendliness of production systems], *Sovremennoe sostoyanie, problemy i perspektivy razvitiya otraslevoy nauki*, 2020, pp. 20–24.
4. Rakhaev V.A., Kuzina E.L., Vasilenko M.A. Planirovanie passazhirskikh perevozok dal'nego sledovaniya. Ekonometricheskoe modelirovanie [Long-range passenger transportation planning. Econometric modeling], *Kompetentnost' / Competency (Russia)*, 2022, no. 3, pp. 30–34. DOI: 10.24412/1993-8780-2022-3-30-34.
5. The impact of the environmental agenda on international rail freight. Information and analytical review; <https://index1520.com/analytics/vliyaniye-ekologicheskoy-povestki-na-mezhdunarodnye-zheleznodorozhnye-gruzoperevozki/>.
6. Vasilenko M.A., Kuzina E.L., Galkin V.A., Drozdov N.A. Managing the Development of the Environmental Protection System in Transport Companies, *IOP Conference Series: Earth and Environmental Science*, Vladivostok, 2021, pp. 62–79. DOI: 10.1088/1755-1315/666/6/062079. EDNHVVVLV/
7. Kurenkov P.V. Rol' i znachenie transportnogo kompleksa Rossii v sisteme mirovykh kommunikatsiy [The role and importance of the transport complex of Russia in the system of world communications], *Transport: nauka, tekhnika, upravlenie. Nauchnyy informatsionnyy sbornik*, 2022, no. 1, pp. 4–9. DOI: 10.36535/0236-1914-2022-01-1. EDNHQZZEI.
8. Kuzina E.L., Tagil'tseva Yu.A. Otsenka ekologo-ekonomicheskoy strategii predpriyatiy transportnoy otrasli [Evaluation of the environmental and economic strategy of enterprises in the transport industry], *Dni nauki KFU im. V.I. Vernadskogo. Materialy mezhd. nauch.-prakt. konf., Simferopol'*, 2017, vol. 5, pp. 949–951.