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THE TOOLS OF GREEN FINANCING FOR URBAN DEVELOPMENT

ИНСТРУМЕНТЫ ЗЕЛЕНОГО ФИНАНСИРОВАНИЯ ГОРОДСКОГО РАЗВИТИЯ

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Аннотация: Статья посвящена инструментам зеленого финансирования для городского развития, с акцентом на российский опыт. Рассматриваются ключевые механизмы, направленные на улучшение экологической устойчивости городских агломераций. В статье подробно обсуждаются такие инструменты, как зеленые облигации, кредиты, государственные субсидии и фонды, которые используются для финансирования экологически устойчивых проектов. Приводится информация о глобальных и российских тенденциях в зеленом инвестировании, включая динамику объемов рынка зеленых облигаций, успехи и проблемы, с которыми сталкиваются города, особенно в России. Оценены возможности для привлечения частных инвестиций и роль государственной поддержки.

В заключение подчеркивается необходимость дальнейшего развития зеленого финансирования для достижения устойчивости городской инфраструктуры и повышения качества жизни в городах.

Ключевые слова: зеленое финансирование, городское развитие, зеленые облигации, экологические проекты, субсидии, зеленые кредиты, энергоэффективность, ESG, зеленые фонды, экосистемы, возобновляемая энергия, экологическое финансирование.

Abstract: This report focuses on the tools of green financing for urban development, with an emphasis on the Russian experience. It examines key mechanisms aimed at improving the ecological sustainability of urban agglomerations. The report provides a detailed discussion of instruments such as green bonds, green loans, government subsidies, and green funds, used to finance environmentally sustainable projects. It also presents information on global and Russian trends in green investment, including the market dynamics of green bond issuance, achievements, and challenges faced by cities, particularly in Russia. The report evaluates the potential for attracting private investment and the role of public support in this context. Finally, it underscores the need for further development of green financing to enhance the sustainability of urban infrastructure and improve the quality of life in cities.

Keywords: green financing, urban development, green bonds, environmental projects, subsidies, green loans, energy efficiency, ESG, green funds, ecosystems, renewable energy, environmental financing.

Cities worldwide face growing environmental challenges, including air pollution, inefficient resource use, and climate change. According to the UN, over 55% of the world's population lives in cities, which increases pressure on natural resources and infrastructure. In Russia, cities are also experiencing rapid urbanization, making sustainable development and the transition to a green economy critically important.

Green investment is the process of financing projects aimed at solving environmental problems and improving energy efficiency, including reducing carbon emissions and restoring ecosystems. In 2024, global green investment reached over \$1 trillion, marking a 30% increase from 2022. In Russia, despite some progress, there is still no unified system for classifying "green" projects, which makes it difficult to attract capital for sustainable urban initiatives.

Green bonds are debt securities used to raise capital for environmental projects. In Russia, the green bond market has been actively developing since 2019. For example, Russian Railways issued bonds worth 500 million euros to finance environmentally friendly projects, such as the modernization of the railway fleet and the purchase of electric locomotives. As of early 2024, the total volume of the green bond market in Russia amounted to over 230 billion rubles, reflecting growing interest in this instrument. However, green bonds make up only 1.4% of the total bond market in Russia, which is significantly lower than international benchmarks (e.g., 7-15% in the EU).

The "Top-10" industries by ESG bond issuance volumes in Russia over the last five years show that the largest volumes still come from development institutions and the railway sector, highlighting the dominance of state-owned structures in the market. Green bonds offer unique opportunities for both issuers and investors. Issuers strengthen their reputation and attract new investors, while investors can finance environmental projects, achieve their ESG goals, and reduce long-term risks. In 2024, the global green bond market reached \$625.8 billion, a 4% increase from 2023. The main areas of funding were renewable energy (17.45%), clean transport (12.95%), and energy efficiency (11.14%).

Green loans are provided on preferential terms for environmentally sustainable projects. In Russia, this instrument is still used to a limited extent, but there are successful examples, such as Sberbank's large loan for the construction of an environmentally friendly residential complex in 2022.

Government support is a key element of green investment. In 2023, Russia's Ministry of Natural Resources allocated over 2 billion rubles for subsidies to modernize wastewater treatment plants in cities, helping to attract private investments for green projects.

Green funds invest in projects aimed at improving urban ecological sustainability. In 2023, the Sustainable Development Fund raised over 5 billion rubles for projects related to municipal infrastructure modernization and the installation of solar panels, highlighting the importance of this mechanism for long-term environmental changes.

Green investment helps create sustainable infrastructure, improve quality of life, and introduce new technologies. However, in Russia, there is a lack of information about projects and challenges in long-term planning, making it difficult to attract capital and implement environmentally sustainable initiatives.

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