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AIFC IN THE DEVELOPMENT OF MECHANISMS OF GREEN FINANCING FOR THE MODERNIZATION OF THE KAZAKHSTAN ECONOMY

Abstract. The scientific article discusses the role of the Astana International Financial Center in the development of green financing mechanisms for the modernization of the Kazakhstani economy. "Green finance" is defined as financial services that provide an environmental impact in the context of sustainable development, in particular, measures aimed at combating climate change, air pollution, loss of biodiversity, improving resource efficiency, waste and water management, and rural sustainability and forestry. The main results of the assessment of the AIFC role in creating green financing mechanisms for the modernization of the domestic economy are presented by the authors in a number of publications.

Key words: AIFC, green finances, investments, capital.

Introduction. Currently, the importance of environmental, social and managerial factors is recognized as the main feature of the development of the financial sector throughout the world. This means that sustainability is a key performance indicator at all levels - from managing individual assets of financial portfolios and financial institutions to managing the financial system as a whole. In the Kazakhstan context, the assessment of the extent to which the AIFC is able to increase the volume of environmental and sustainable financing in the country and accelerate measures for sustainable development is of particular relevance. The main results of the evaluation of the role of the AIFC in creating green financing mechanisms for the modernization of the domestic economy are presented by the author in a number of publications [1, 2].

As known, "Green Finance" is defined as financial services that provide environmental benefits in the context of sustainable development, in particular, measures aimed at combating climate change, air pollution, loss of biodiversity, improving the efficiency of resource use, waste and water management, and also the sustainability of agriculture and forestry. This term is often used to indicate the environmental nature of specific assets (for example, green bonds). Three key signals testify to the aforementioned roll in the global financial sector towards strengthening the role of sustainable financing:

- Financial relevance. Investment institutions with assets under management of more than 70 trillion US dollars currently adhere to the Principles of Responsible Investments, which require the integration of environmental, social and management (hereinafter – ESG (environmental, social and governance)) factors in the procedure for capital allocation, interaction with shareholders and policy discussions.

- Attraction of capital. Green bonds are one of the most visible indicators of the ongoing redistribution of capital. In 2018, global green bond issuance reached a new record of $ 167.3 billion, increasing from $ 81 billion in 2016 to reach $ 250 billion by the end of 2019. In 2017, the United States, China, and France were the leading issuing countries.

Stock markets are also transforming in response to the sustainability problem: Stock Exchanges for Sustainable Development (SSE) has so far joined 75 exchanges as members, including KASE, together representing more than 77% of the market capitalization of shares worth more than 55 trillions of US dollars [3].

- Measures in the framework of national policy. By October 2017, over 300 financial and regulatory policies were in place in more than 60 countries to ensure sustainability. Following the example of the EU countries, China, Morocco, many states have begun to develop national roadmaps for green and sustainable financing.

Methods. When writing the article, general scientific and special methods were used, such as: the system analysis method; content analysis method; comparative analysis method; analysis and synthesis method; system approach method.

Results. Kazakhstan has already taken important early steps to achieve its goals on the path to a low-carbon future by developing national strategic plans and green economy development programs. Progressive domestic laws have been adopted, including laws on renewable energy, energy efficiency and the introduction of an emissions trading system. These efforts, supported by ambitious target indicators for reducing carbon emissions and ensuring sustainability, are guided by the following regulatory documents: National Development Strategy "Kazakhstan - 2050", Concept for the Republic of Kazakhstan Transition to a Green Economy from 2013, Nationally Determined Contribution of Kazakhstan (NDC) providing for, in accordance with the Paris Agreement, a reduction of greenhouse gas emissions throughout the economy by 15% by 2030 compared with the 1990 level, Strategic Ian development "Kazakhstan - 2025".

The momentum described above is encouraging, but remains insufficient to achieve the goals of the Paris Agreement. In Kazakhstan, reducing emissions by 132 MtCO 2e to achieve the unconditional NDC target by 2030 requires a green investment of $ 140 million from 2016 to 2030 [4]. These numbers reflect the huge need for funding. However, due to the complexity of technologies and long investment cycles, energy saving and environmental protection projects have always faced the problem of difficult and costly access to financing, and traditional financing instruments are not able to satisfy the huge demand for them. Green projects are usually capital intensive, often requiring long-term financing. At the same time, as the practice of state investment banks in developed countries shows, achieving a yield of 6-9% on green investments made is seen as a huge success. Accordingly, the implementation of government support programs for project green financing is absolutely necessary. In the world, the ratio of the shares of the public sector, represented mainly by financial development institutions, and the private sector in climate investment, amounted to 37% in 2016 compared to 63%. In Kazakhstan, we can only talk about the beginning of real state support in the form of financing, benefits or grants to the initiators of the introduction of green technologies.

In this situation, large-scale mobilization of financing of green investments from the private sector is required. Public resources are limited, and long-term dependence on public investment should be avoided to ensure sustainable green growth. It should also be noted that in world practice more than 79% of green financial resources in 2015-2016 were attracted in the same country in which they were spent, so it is likely that most of the investments in Kazakhstan can come from domestic sources. And this underlines the importance of sound national policies and regulations for environmentally friendly projects.

In particular, it is necessary to develop innovative models of financial investments, new mechanisms for raising funds from both domestic and international sources, and companies may require significant new incentives to increase the profitability of green investments. Kazakhstan has not yet developed the mechanisms for creating and developing a green cluster in the economy and limited the experience of public-private partnerships in this industry, which is represented by the recently created (in July 2018) "green" fund Green Capital Management at the International Center for Green Technologies. A green financing system is needed that focuses on specific sectors that need the most funding and where emission reductions can be achieved at relatively low costs. For example, according to the estimates of the Concept of transition to a green economy, up to 75% of the green financing necessary to achieve the set goals should be invested in renewable energy sources, in the transition to gas electricity and energy efficiency. Moreover, according to a recent study, the transport, heating and construction sectors are promising areas for green investment, with little or no government support [5].

Based on the foregoing, it is necessary to position the potentially key role of the AIFC in mobilizing green investment and in general for the formation of a sustainable economy. As such, financial centers create a powerful clustering effect, concentrating in one place a complex of interconnected financial operations and regulation, which can be used for more systematic measures to expand environmentally-oriented financing.

The growth of green and sustainable financing in the world is currently taking place with the participation of an increasing number of financial centers that have put forward their own initiatives in the field of green and sustainable financing in addition to market forces. At the same time, some centers focus more on capital markets, while others focus on banking services, including SME financing. This diversity is real power and means that there is no single template for greening financial centers. The formation of these initiatives is dictated by two drivers: the desire of governments to attract financial centers to the problem of mobilizing capital to achieve key goals in the field of environmental protection, climate and sustainable development, and, secondly, the desire of the centers themselves and their key players to promote sustainable development as the main element of competitiveness.

The result is a new generation of public-private partnerships. Some of them are led by assistance agencies (such as the City Financial Office, Casablanca, City of London Corporation, EUROPLACE in Paris). In other cases, public-private partnerships are facilitated by national sustainable development bodies (for example, China's Green Finance Committee, Ireland's Sustainable Nation Committee, and Switzerland's Sustainable Finance Agency). In some centers, private sector initiatives are based on public policies (for example, the Hong Kong Green Finance Working Group and the Frankfurt Stock Exchange Sustainable Finance Initiative). In addition, a number of financial centers are actively involved in sustainable financing without developing a special initiative (for example, in Mumbai or New York). Finally, most financial centers are not yet involved in this trend.

There is currently no single set of indicators for measuring green and environmentally-friendly financing at the country or financial center level. To give an idea of the range of factors that can be considered, table provides quantitative data on some key measurements at the country and center levels [6]. These key indicators include: 1) the size of the stock market, 2) disclosure of environmental effects according to the requirements of the stock exchange (assessment of disclosure is given on a 100-point scale), 3) "green" revenues as a percentage of the total issue proceeds, 4) financing of renewable energy in the country (percentage of financing of renewable energy sources), 5) volume of green bonds issue.

Green and Sustainable Financing in G7 Countries

Country	Financial centre	Market capitalization, trillion USD	Rating of disclosure of ecological effect information (max=100)	Share of "green emissions", %	RES in the country	Green Bonds Issue (2016), billion USD
Canada	Toronto	1,6	73	0,68%	88,80%	0,537
France	Paris	2	88	0,66%	96,40%	1,9
Germany	Frankfurt	1,6	82	1,31%	93,20%	4,3
Italy	Milan	0,6	73	2,35%	99,10%	0,25
Japan	Tokyo	4,5	68	2,01%	39,50%	1,1
United Kingdom	London	3,3	83	0,38%	87,80%	–
USA	NewYork	26	70	0,72%	74,90%	15,5

Note: according to Financial centres for sustainability reviewing G7 financial centres in mobilizing green and sustainable finance, The UN Environment Inquiry.

As can be seen from the table, the indicators vary in a wide range without a clear correlation between each other (for example, between the level of information disclosure and the volume of green bonds issued). For example, the Paris Financial Center has the highest disclosure of information on environmental effects, and the country is one of the leaders in the field of renewable energy financing, however, the volume of green bond issues relative to the total volume of issue receipts is significantly lower than Tokyo, while in Japan the share of renewable energy financing is in relatively modest position.

In 2017, two new initiatives were launched to better understand how financial centers are involved in promoting sustainable development. The first one was nominated by the "International Network of Financial Centers for Sustainable Development" (FC4S), of which AIFC is also a member. Its goal is to evaluate the progress of various centers in the field of green finance and appropriate benchmarking. The second initiative, led by Finance Watch together with Z / Yen, aims to create a single index of financial

centers in the field of green financing [7]. In the Global Green Finance Index (GGFI) of March 2018, London, Luxembourg and Copenhagen are in first place, with financial centers in Western Europe generally ahead of centers from other regions. Centers with strong leadership in green finance are expected to rise in rank with Paris at the top of the list.

The AIFC is not yet included in this index, but it has been given the task of assessing, conceptualizing and initiating the development of a domestic green financing system. Together with the EBRD Center, the concept of "Green Financial System for Kazakhstan" (hereinafter referred to as the FSF) was developed, which defines approaches to building green finance in the country. The main instruments of green financing are green bonds, soft loans, subsidies for green projects and others. The introduction of a "green financial system" should bring not only environmental benefits, but also stimulate new sources of growth, helping to strengthen the role of Kazakhstan as a prominent regional and international financial player at the forefront of a dynamic and rapidly growing sphere of finance.

Other institutions of Kazakhstan can play an important role in creating an effective green financial system, including the SWF Samruk-Kazyna, the National Holding Baiterek, the banking sector, pension funds and the domestic capital market.

So, since 2018, Samruk-Kazyna has strengthened the degree of disclosure of information about ESG factors in the consolidated reporting on sustainable development based on the principles of the Global Reporting Initiative. However, the Fund does not define green investments as a strategic priority. It delegates to his subsidiaries the right to determine the economic feasibility and attractiveness of green investments on an individual basis.

The National HoldingBaiterek is an important institution aimed at promoting economic diversification and sustainable development. The holding supports the green economy through separate lending and support programs. For example, a joint project of UNDP-GEF, the Government of the Republic of Kazakhstan and the "Damu" Fund "Sustainable Cities for Low-Carbon Development" supports private investment in energy-efficient urban infrastructure by subsidizing a 10% interest rate on loans and providing guarantees up to 50% of the loan amount. Development Bank of Kazakhstan JSC in 2017 provided a loan of 5 billion tenge to the project for the construction of the Turgusun hydroelectric power station in the East Kazakhstan region, implemented under the law on supporting "green energy" in Kazakhstan. But Baiterek does not place much emphasis on the development of a green economy, and the policy and practice of disclosing information in the field of environmental protection are also limited.

The banking sector of Kazakhstan is a key source of financing for development. However, the banking sector is not deep enough both in absolute and relative terms, and is still struggling with the residual consequences of the global financial crisis. The recent path to banking sector reform and rehabilitation has been positive, and there is interest in green investment projects. But today, the banking sector plays a limited role in the development of the green economy. Multilateral development banks (European Bank for Reconstruction and Development (EBRD), Eurasian Development Bank (EDB), Development Bank of Kazakhstan (DBK)) are still the main institutions providing credit lines and financing for new projects in tenge at fairly low interest rates.

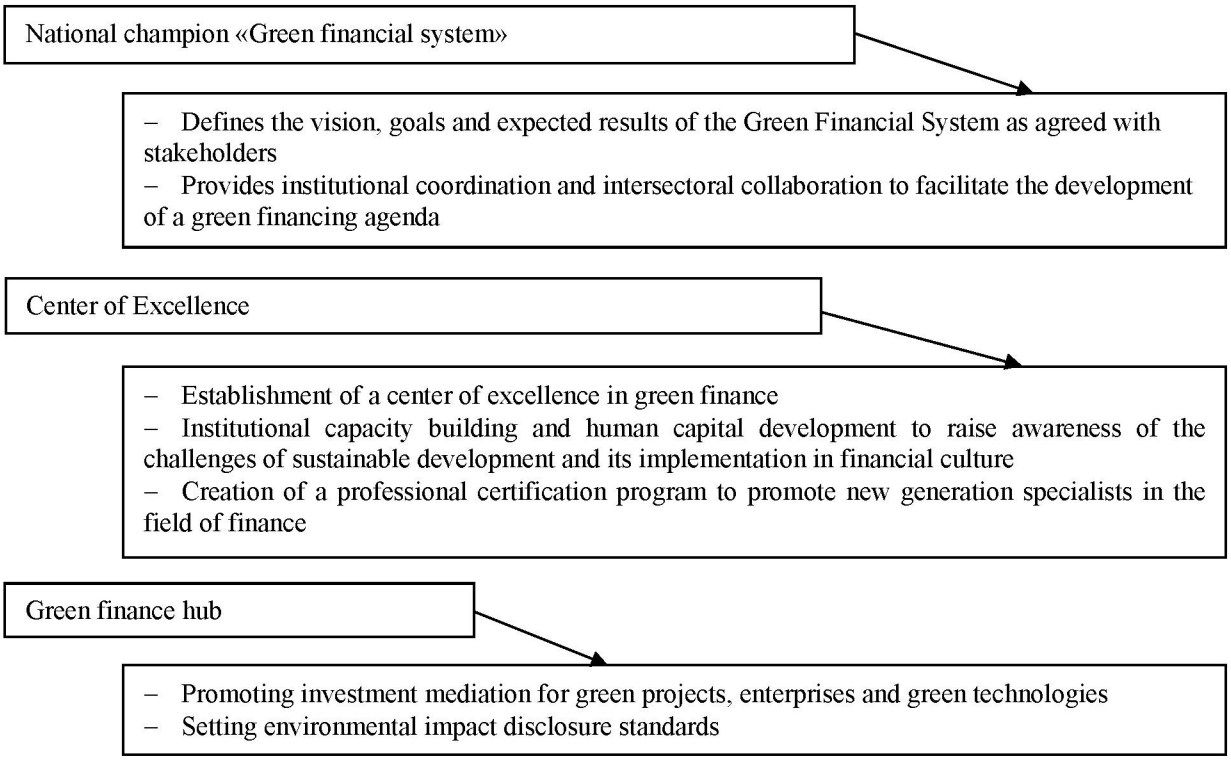
The state-controlled Unified Accumulative Pension Fund represents a significant and growing potential source of long-term capital. It is expected that it will play an increasingly important role in domestic capital markets. However, as is the case with other financial institutions in Kazakhstan, the role of the UAPF in the development of the green economy is not significant. In general, national funds do not have a special mandate for green investments.

As repeatedly noted above, today the domestic securities market is also not the main source of long-term capital. Kazakhstan's the largest securities exchange, KASE, is a member of the Sustainable Stock Exchanges Initiative and published in March 2018 detailed recommendations for issuers on preparing ESG reports. However, these statements are not a listing requirement, and so far the reports of voluntary issuers have not been published. Thus, the exchange currently plays an insignificant role in promoting the country's green agenda.

At present, key financial sector entities, banks, and institutional investors have only partially taken the envisaged voluntary measures. Thus, not a single Kazakhstani investor has joined the UN Responsible Investment Principles, which is a set of six principles that provide a global standard for responsible investment in the aspect of environmental, social and corporate governance (ESG). As of August 2018, more

than 1,180 investment organizations from more than 50 countries, representing approximately $ 70 trillion, have confirmed their adherence to the Principles [8]. Banks of Kazakhstan, for their part, have not yet implemented the Equator Principles, a set of voluntary rules adopted by private financial institutions to ensure that when considering large-scale construction projects, potential impacts on the environment and populated territories are considered. There is no centralized monitoring of green investment projects. Nationwide, many special green products like green housing deposits, green mortgages and green securitization, green insurance have not yet been developed.

Given the unique regulatory status of the AIFC, the mandate entrusted to it to develop green finances and the high political priority in achieving success, the center is suitable for fulfilling the main coordinating role. It acts as the core on which the developed policy, "green" financial decisions and activity in the domestic market will be based. This central coordinating role, thus, provides critical support for the demand for green financing, gives the center the necessary political influence to promote the green agenda and attract private sector investment. This role will be based on the principles shown in figure.



Figure

Currently, regulatory acts do not give special attention directly to "green" financing. In the "Green Financial System for Kazakhstan" concept, the government recommended that the AIFC take a leading role in the development of the National Roadmap for the implementation of the PFS at the level of a strategic document. On its territory, the AIFC has the right to introduce standards that are different from those applied at the national level, and thus act as an innovator, testing the developed rules at the initial stage before their subsequent application throughout the country. Consequently, AIFC has the opportunity to create a working regulatory framework for green financing by developing rules:

- disclosure of environmental risks, effects and mitigation measures;
- assessment and monitoring of environmental and climate risks;
- on the responsibility of creditors, investors and the AIFC itself for adverse environmental impacts;
- according to the criteria and procedures for determining "green" investment projects;
- according to the procedure for monitoring green investment projects and reporting on their environmental impact.

The main recommendations for the establishment of the GFS in Kazakhstan are structured in three consecutive stages: the Initial stage (2017-2018), the Deepening Stage (2019-2021) and the Extension Stage (2022-2025). At the initial stage, the AIFC's potential can be strengthened by establishing partnerships with international organizations in the field of green finance and representing the financial sector in key national bodies for the development of the green economy. A further focus of the initial stage is the launch of specific benchmark financial instruments, i.e. issuing a green bond and studying its impact on other AIFC strategic directions, in particular, the development of local capital markets, asset management and wealth management of wealthy individuals. This involves a number of incentive measures, for example, the development of localized criteria for classifying investments as green finance, the introduction of international standards to create a national scheme for issuing green bonds and the mobilization of the domestic and international financial community.

In view of the fact that the AIFC is faced with the task of increasing the ability of the financial system to mobilize private capital for green investments and contribute to changes in the real economy through investment decisions, it is important to consider its role in the development of specific areas of green financing, in particular, green banking, green bonds, green funds and green indices.

Speaking about green banking, it is important to keep in mind that banking is also part of the AIFC regulated operations, and it is on the basis of banks registered with the AIFC that the center can take the first steps towards the development of green banking in Kazakhstan, primarily with the involvement of foreign banks, and later - domestic banks. As noted above, Kazakhstan banks have all the legal capabilities to become a member of a financial center, subject to the prudential requirements of the center and the availability of resources to ensure operations on its territory.

A green banking system is a fundamental part of a green financial system. Banking systems around the world are at different stages of the transition to green financial activities. According to a UNEP study, approximately 80% of the G20 green infrastructure financing is funded, at least in part, by banks. Of the estimated $ 50 trillion of banking assets in emerging markets (about a third of global banking assets), less than 10% is currently directed to green lending [9]. Green loans account for 40% of the total portfolio of the Green Climate Fund [10]. According to IFC, the total amount of syndicated lending in 2014 amounted to 1.1 trillion. US dollars, of which almost 15% of loans were “green” in value terms, while the USA was the leader in terms of lending by a wide margin. The share of green loans in the total number of loans issued varies significantly across countries, with an average of 15 percent [11].

Despite a number of examples of how private sector banks implemented the green financing program in the G20 countries, experts admit that private banks and companies avoid the risks associated with financing the first steps of the transition to a green economy [12]. Moreover, in Kazakhstan, measures to overcome these barriers should be comprehensive at the national level and should not be limited to AIFC measures. This is especially true of the banking sector, which in the early stages cannot be a full-fledged member of the AIFC in the green lending sector, and therefore the role of the National Bank and development institutions, rather than the AIFC, will, for objective reasons, be key to stimulating green lending in Kazakhstan. Green state investment banks, specialized green financial institutions, and other green banking structures can provide a way to develop the banking system to help share risks and send a strong signal of government confidence regarding green investments and the green financial system.

Drawing analogies with foreign financial centers and the role of banks in these centers, especially in developed countries, it must be borne in mind that these centers mainly operate within the framework of a nationwide jurisdiction and one regulatory field, unlike Kazakhstan, which refers to two regulatory jurisdictions, each of which will solve the development of green financing at its own pace, with all the mutual influence. At the level of national laws, disclosure requirements on environmental effects and environmental risks can be included in the Law on Banks and Banking activities.

At present, Kazakhstan's lending by commercial banks to green projects is being hindered by the perceived high risks and low economic feasibility. Barriers to credit expansion in general are a number of factors. Firstly, deposits are represented to a large extent in foreign currency, and loans are in demand in the national currency. So, as of December 1, 18, the share of deposits in foreign currency in Kazakhstan

banks amounted to 49.5% [13]. Secondly, deposits are predominantly short-term, and the required loans are long-term. Thirdly, as was shown in the previous subsection, interest rates in national currency and collateral requirements are high. Green projects are currently not considered profitable in themselves, and need government support. In addition, banks currently do not set goals for green financing, and there are few incentives for this. And finally, banks are not yet required to assess environmental risks and project security.

Having a good business case is critical to driving widespread adoption and innovation in green banking. Due to the fact that this practice is still at the development stage, there are few academic and empirical studies on the real costs and benefits of banks that have embarked on the path of green lending. At the same time, there is significant research evidence that firms with high corporate social responsibility ratings and ESG factors demonstrate lower preliminary cost of capital for debts (loans and bonds) and equity. In fact, they are characterized by lower risk in a fundamental sense (although not necessarily in terms of short-term volatility) [14]. Hermes Investment research shows that companies with better ESG ratings have lower credit default spreads [15]. At the same time, according to a survey conducted by IFC in 25 countries, since the practice of green lending requires a more thorough examination and rigorous selection of clients and projects for financing, banks tend to consider green lending as a potentially more expensive area of business. Therefore, the industry needs local champions who enter the field of "green" financing and are ready to share their experience, demonstrate costs and profits. It is here that the key role of the AIFC is manifested, whose banks, both international and domestic, can act as "pioneers", subject to the correct regulatory policy [16].

Discussions. Thus, summing up the role of the AIFC in the development of green financing mechanisms for economic modernization, we note that it will consist in stimulating the green financial instruments market both on the AIFC exchange and within the framework of banking activities of its participants, as well as in attracting organizations engaged in green finance due to the formation of a favorable legal regime and certain forms of state support. At the same time, speaking in the person of the Green Finance Hub created at the forefront of promoting green financial instruments, the AIFC is building the legal framework and experience for subsequent replication in the republican practice [17]. Equal importance should be attached to the development of human capital in the green economy through the establishment on the basis of the AIFC Green Finance Hub of the relevant competence centers and research working groups, along with close cooperation with international organizations offering grant, preferential financing and advisory assistance in the field of green financing.

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ҚАЗАҚСТАН ЭКОНОМИКАСЫН МОДЕРНИЗАЦИЯЛАУ ҮШІН ЖАСЫЛ ҚАРЖЫЛАНДЫРУ МЕХАНИЗМДЕРІН ӘЗІРЛЕУДЕГІ АХҚО

Аннотация. Ғылыми мақалада Астана халықаралық қаржы орталығының Қазақстан экономикасын модернизациялау үшін жасыл қаржыландыру тетіктерін дамытудағы рөлі талқыланады. «Жасыл қаржыландыру» дегеніміз – тұрақты даму жағдайында экологиялық артықшылықтар беретін қаржылық қызметтер, атап айтқанда климаттың өзгеруіне, ауаның ластануына, биоалуан түрліліктің жоғалуына, ресурстардың тиімділігін арттыруға, ағындар мен су ресурстарын басқаруға және ауылдардың тұрақтылығына қарсы бағытталған шаралар және орман шаруашылығы. Авторлар отандық экономиканы модернизациялауүшін «жасыл» қаржыландыру тетіктерін құрудағы AIFC рөлін бағалаудың негізгі нәтижелерін бір қатар жарияланымдарда ұсынады.

Түйін сөздер: АХҚО, жасыл қаржы, инвестициялар, капитал.

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МФЦА В ВЫРАБОТКЕ МЕХАНИЗМОВ ЗЕЛЕНОГО ФИНАНСИРОВАНИЯ ДЛЯ МОДЕРНИЗАЦИИ КАЗАХСТАНСКОЙ ЭКОНОМИКИ

Аннотация. В научной статье рассматривается роль Международного финансового центра Астаны в выработке механизмов зеленого финансирования для модернизации казахстанской экономики. «Зеленые финансы» определяются как финансовые услуги, обеспечивающие экологический эффект в контексте устойчивого развития, в частности, мер, направленных на борьбу с изменением климата, загрязнением воздуха, утратой биоразнообразия, на повышение эффективности использования ресурсов, управления отходами и водой, а также устойчивости сельского и лесного хозяйства. Основные результаты оценки роли МФЦА в создании механизмов зеленого финансирования для модернизации отечественной экономики изложены авторами в ряде публикаций.

Ключевые слова: МФЦА, зеленые финансы, инвестиции, капитал.

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REFERENCES

[1] Takhanova M.S. The role of the AIFC in the formation of the green financial system of Kazakhstan // Materials of the International Scientific and Practical Conference dedicated to the 25th anniversary of the national currency of the Republic of Kazakhstan "Modernization of the economy of Kazakhstan - a factor in the stability of the financial system of the state and national currency". Astana: ENU named after L.N. Gumilev. November 9, 2018. P. 209-212.

[2] Takhanova M.S. The potential for the development of a green financial system on the basis of the AIFC // Collection of materials of the International scientific-practical conference "New financial model as a factor in improving the welfare of Kazakhstan people. Astana: ENU named after L. N. Gumilev. January 25, 2019. P. 738-744.

[3] FinancialcentresforsustainabilityreviewingG7financialcentresinmobilizinggreenandsustainablefinance,TheUNEnvironmentInquir, 2017 - http://unepinquiry.org/ (дата обращения: 03.03.2019 г.)

[4] FinalReport:GreenFinancialSystemforKazakhstanPartI:Synthesis,04October2017-http://greenfinance.kz (дата обращения: 11.03.2019 г.)

[5] AsianDevelopmentBank.EconomicsofClimateChangeMitigationincentralandWestAsia, February 2017. https://www.adb.org (дата обращения: 03.03.2019 г.)

[6] OffshoreFinancialCentersIMFBackgroundPaper,2000 -https://www.imf.org (дата обращения: 06.12.2018 г.)

[7] Acceleratingfinancialcentreactiononsustainabledevelopment.TheUNEnvironmentInquiry.2017-http://unepinquiry.org/ (дата обращения: 03.03.2019 г.)

[8] UN PrinciplesforResponsibleInvestment-https://www.unpri.org/pri

[9] GreeningtheBankingSystem-ExperiencesfromtheSustainableBankingNetwork(SBN),2016 - https://www.ifc.org/ (дата обращения: 03.03.2019 г.)

[10] GCF - https://www.greenclimate.fund/what-we-do/portfolio-dashboard (дата обращения: 03.03.2019 г.)

[11] GreenFinanceABottom-upApproachtoTrackExistingFlows.IFC (2017). - https://www.ifc.org/ (датаобращения: 03.03.2019 г.)

[12] Green financial systems. Analysis of international experience - http://greenfinance.kz (датаобращения: 03.03.2019 г.)

[13] The current state of the banking sector of the Republic of Kazakhstan as of December 1, 2018, National Bank of the Republic of Kazakhstan - http://nationalbank.kz (дата обращения: 11.03.2019 г.)

[14] Deutsche Bank Group, Sustainable Investing: Establishing Long-Term Value and Performance. 2012 - https://www.db.com (датао бращения: 03.03.2019г.)

[15] Hermes shows relationship between ESG factors and credit spreads. 19.04.2017 - https://www.institutionalassetmanager.co.uk/ (дата обращения: 03.03.2019 г.)

[16] Takhanova M., Sembieva L. Ways to increase the liquidity of the capital market in the international financial center "Astana" // Izvestiya NAN RK. 2019. N 3. P. 60-69.

[17] Zhanybaeva Z.K., LukpanovaZh.O., Orazgalieva A.K. The latest technologies in the financial sector // Izvestiya NAN RK. 2019. N 3. P. 121-126.