Environment, energy efficiency and renewables

Environment
Over the past years, Russia has adopted complex environmental legislation that is generally in line with commonly accepted international standards. Its practical implementation, however, remains limited due to the general character of regulations and the inconsistent application of the corresponding penalties. This forces the legislator to develop the respective regulations further with clearer commitments and a more transparent system of liabilities and sanctions.

The development of Russian environmental legislation in close connection with other relevant sectors is also driven by the desire to incentivise Russian-based production and therefore support the so-called “localisation” trend.

For example, on 30 June 2015, a new Federal Law on industrial policy (the “Industrial Policy Law”) entered into force, setting out the main principles that govern specific incentives intended to support the development of industrial production in Russia. The law includes specific support to be granted to projects involving the use of so-called “best available technologies” ("BATs"), which are closely linked to the implementation of environmentally efficient solutions.

Notwithstanding these incentives, investment in environmentally efficient technology in Russia remains low in comparison to developments in the rest of the world. This is due to regulatory constraints as well as to a lack of public awareness and understanding of environmental issues.

Legislation on environmental protection
The main federal law setting out the fundamental principles of environmental regulation in Russia is Federal Law No. 7-FZ dated 10 January 2002 “On Environmental Protection” (the “Environmental Protection Law”). The Environmental Protection Law provides for an overall framework for environmental management and imposes general requirements related to the construction and operation of various facilities that may be harmful to the environment.

Types of environmentally dangerous facilities
The Environmental Protection Law classifies facilities depending on the level of their environmental pollution and indicates which methods of state

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1 Please see the Import substitution and production localisation in Russia chapter on page 183.
control are applicable to each category of facility, as follows:

<table>
<thead>
<tr>
<th>Category of facility</th>
<th>Facility description (level of environmental pollution)</th>
<th>Method of state control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category I</td>
<td>Environmentally dangerous facilities (generally relate to the industries of energy, heavy metallurgy, etc.)</td>
<td>Integrated activity permits (valid for seven years)</td>
</tr>
<tr>
<td>Category II</td>
<td>Facilities with moderate environmental impact</td>
<td>Declarations on environmental impact (valid for seven years)</td>
</tr>
<tr>
<td>Category III</td>
<td>Facilities with insignificant environmental impact</td>
<td>Industrial ecological control programmes (also applicable to categories I and II)</td>
</tr>
<tr>
<td>Category IV</td>
<td>Facilities with minimal environmental impact</td>
<td>None</td>
</tr>
</tbody>
</table>

The criteria to classify facilities are currently established by Government Decree No. 1029 dated 28 September 2015.

Only facilities of categories I and II are subject to an obligation to meet the requirements of maximum allowable emission and discharge values.

### Environmental fees relating to emissions, discharges and waste management

The environmental fees (pollution discharge fees) are calculated for each waste ingredient and pollution type depending on the level (volume or weight) of the danger they pose to the environment and public health.

The following activities are subject to environmental fees:
- the emission of polluting substances into atmospheric air by stationary sources;
- the discharge of polluting substances into bodies of water; and
- the storage and burial of production and consumption waste.

The corresponding environmental fee structure is calculated depending on the following elements:
- pollution within the permissible norms and established limits;
- application of an increasing coefficient for certain regions and environmental facilities based on ecological factor;
- application of an increasing coefficient for the above-limit discharge (x25 for waste, and x25 or x100 for other polluting substances depending on the facility’s category); and
- application of an incentive system (reducing coefficients down to x0 or increasing coefficients up to x100 depending on the application of environmentally friendly technologies and BATs; implementation of
measures and plans aimed at reduction of pollution, etc.).

In addition, on 22 April 2016, a Government Decree setting the rates of the environmental fee relating to the management of production and consumption waste came into force\(^3\). Such environmental fee must be paid by goods manufacturers and importers who fully or partially fail to perform their waste management obligation by not meeting the established compulsory recycling targets\(^4\). The list of goods, in respect of which this environmental fee is payable, is quite broad and contains 54 types of goods including textiles, paper products, petroleum products, plastic products, batteries, computers, communications and electrical equipment. The environmental fee rates are set in Russian roubles for each ton of the product and/or packaging to be recycled and range, for example, from RUB 2,025 (EUR 29) for accumulators to RUB 33,476 (EUR 478) for rechargeable batteries.

RUB 70 = EUR 1

\(^3\) Russian Government Decree No. 284 dated 9 April 2016.

\(^4\) The compulsory recycling targets are set for 2018-2020 by Russian Government Ordinance No. 2971-r dated 28 December 2017. Ambitious compulsory recycling targets have been set for 2020, including for (i) metal containers (30%); (ii) tyres and rubber products (30%); and (iii) petroleum products and glass (25%).


\(^6\) Save for Moscow and Saint Petersburg, for which the launch of the “waste reform” has been postponed to 1 January 2022.

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**“Waste reform”**

On 1 January 2019, the so-called “waste reform”\(^5\) was launched in Russia.

Its main goals are to organise the process of household waste treatment, including its disposal, and to implement the separate collection of such waste.

To this end, each region\(^6\) has to implement the following measures:

— prepare and approve a regional waste treatment scheme;
— select a regional operator responsible for the waste treatment process in the relevant region;
— set regional waste treatment tariffs payable by all entities and individuals generating waste;
— build waste sorting and processing facilities; and
— implement a separate waste collection system.

As of 1 January 2020, most regions of Russia approved waste treatment schemes, selected regional operators and set relevant tariffs.

However, in many cases, regional operators are suffering from insufficient and irregular financing and lack of available facilities. The adopted regional waste treatment schemes are not always well developed and usually require additional revisions.
There is room for improvement in this sphere, which, notwithstanding the above, remains attractive for potential investors. This is particularly true for the creation of the required infrastructure (e.g. waste sorting and processing plants; waste collection and transporting vehicles and equipment) and the implementation of separate waste collection systems in the regions.

**Setting emission quotas**

On 1 January 2020, the Russian Government launched an experiment on setting emission quotas.

The experiment will be carried out in 12 industrial cities of Russia until 31 December 2024.

The ultimate goal of the experiment is to reduce atmospheric air pollution.

At the first stage, the authorities will:
- adopt a complex plan of measures for the reduction of emissions in each city; and
- prepare summary calculations in order to identify the main pollutants and facilities emitting such pollutants.

Thereafter, the quotas will be set for the above facilities, and entities or individuals operating them will bear additional obligations to limit emissions in order to meet the set quotas and regularly report to the supervising authorities.

**Sanitary protection zones**

The regulation of sanitary protection zones (“SPZs”) in Russia has always been deficient. For a long time, the relevant provisions on SPZs have been provided by the sanitary and epidemiological rules (“SanPiNs”), but these did not contain comprehensive regulation.

According to Federal Law No. 342-FZ, all estimated or preliminary SPZs established earlier will cease to exist by 2022, and all SPZs will be established in accordance with the new rules.

From 1 January 2022, SPZs and the related restrictions will be deemed to be created from the date of their registration in the Unified State Register of Immovable Property.

Government Decree No. 222 dated 3 March 2018 further provides that SPZs must be established in relation to facilities which have a chemical, physical or biological impact on humans and the environment (“Hazardous Facilities”).

It is expressly prohibited to use the land plots located within the boundaries of an SPZ for the following purposes:
- building residential real estate, educational and medical units, children’s recreation organisations,

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open-air sports facilities, recreation and gardening zones;
— setting up food, pharmaceutical or drinking water production facilities, if the quality of the relevant products may be affected by neighbouring Hazardous Facilities;
— building or refurbishing capital structures if their permitted use does not comply with the restrictions established within an SPZ.

Any person affected by an SPZ is entitled to arrange for necessary measurements to be effected and submit an application for reducing the SPZ without the consent of the owner(s) of the relevant land plots or Hazardous Facilities. Previously, any changes to an SPZ initiated by third parties were subject to such consent. This change is supposed to intensify the land development process.

**Industrial policy legal framework**

In line with the shift towards an import substitution model for the Russian economy, the Industrial Policy Law prioritises regional development and favours Russian-based manufacturers. This forces international investors to change their business models by favouring industrial production within Russia.

For example, the Industrial Policy Law expressly introduced preferences for Russian-based production with priority for goods produced in Russia for public procurements.

However, given the framework nature of the Industrial Policy Law (meaning that its general principles and provisions are implemented through other laws and secondary legislation), this preferential regime is applicable to specific areas such as military equipment, vehicles, medical equipment, pharmaceutical products and certain types of food products.

**Special investment contracts**

The Industrial Policy Law created a new contractual framework for projects in the industrial sector by introducing the concept of special investment contracts (“**SPICs**”). Under such contracts, investing companies that undertake to implement investment projects will be guaranteed long-term incentives by the Russian State.

What mainly distinguishes SPICs from other contractual arrangements formalising public-private partnerships is that the state does not contribute budgetary funds or state-owned property to the relevant project.

The cost of these state incentives is expected to be offset by the anticipated positive economic effect for the state in the form of new infrastructure, jobs and taxes being paid by new businesses.

New rules for entering into SPICs (so-called “**SPIC 2.0**”) were adopted by Federal Law No. 290-FZ “On Amendments to the Federal Law on Industrial Policy regarding the Regulation of SPICs”⁹. In particular,

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these new rules provide for the following:

— SPICs are available only to those investors who intend to introduce modern technologies (as indicated in a list to be approved by the Russian Government).

— A SPIC has to be entered into through a tender process initiated by the public party or the investor itself. As a general rule, this will be in the form of an open tender. However, if the project relates to military, special or double-purpose technologies, a closed tender will be organised.

— A SPIC is implied to be a contract between (i) the investor; (ii) the Russian Federation; (iii) the relevant Russian region; and (iv) the relevant municipality where the project is intended to be implemented.

— The duration of a SPIC will depend on the volume of investments, but will not exceed 20 years.

— The previous minimum investment threshold (RUB 750m, i.e. EUR 10.7m) is no longer applicable.

— One SPIC may only be concluded with one investor. This differs from the previous rules (“SPIC 1.0”). Under SPIC 2.0, it is no longer possible to add other participants on the investor’s side (such as co-investors, involved parties) who could also qualify for government support measures.

— The total amount of financial state support under a SPIC may not exceed 50% of the total investment required by such SPIC. If this limit is exceeded, the provision of state support measures to the investor is suspended.

— The main tax benefit for a SPIC participant remains the income tax rate of 0% to be paid to the federal budget and the possibility of reducing its regional component down to 0%.

— SPICs that were concluded under the “SPIC 1.0” rules remain in force. Such SPICs can be amended or terminated by the parties on the basis of the laws then existing at the time of their conclusion. However, it is not possible to enter into a new SPIC under the previous regime.

The new SPIC 2.0 regime is aimed at increasing the transparency of the procedure and introducing a number of positive aspects in the regulatory framework. However, lack of required secondary legislation, which was initially meant to be adopted by the end of 2019, prevents all parties from implementing investment projects under the new regime. Secondary legislation is expected to be adopted in the second quarter of 2020.

Currently, there is another draft of a federal law aiming to regulate the conclusion of agreements affording support to investments in the Russian Federation. This draft bill introduces a new type of agreement – on the promotion and protection of investment (“SZPK”). Unlike SPICs, SZPKs are supposed to be used not only in production-based industries, but also in...
other sectors such as services, intellectual property, infrastructure. It also provides for a less formal contract conclusion process – by just filing a declaration on the implementation of the investment project.

Since this bill has not been adopted yet, it is difficult to forecast how SPICs and SZPKs will coexist.

**Incentives**

The Industrial Policy Law introduced the following incentives for the industrial sector:

— financial support in the form of various subsidies (for R&D expenditures and for the development of industrial infrastructure) to be granted on the basis of tenders, with priority being given to projects involving the use of BATs (please see next section for more details);
— refinancing of loans and access to long-term loan financing on competitive terms¹⁰;
— various types of tax incentives, such as special incentives to be provided until 2025 for some investment projects that have been duly approved by the Russian Government¹¹; and
— creation of dedicated state funds to stimulate industrial development (by way of loans, grants, equity participation in project companies, leasing, etc.).

**BATs**

The concept of BATs was introduced by Federal Law No. 219-FZ dated 21 July 2014 but only entered into force to the full extent on 1 January 2020. To date, several relevant Government Decrees and Ordinances have already been adopted on the applicable list of industries¹², BAT qualification and BAT handbooks¹³, etc.

The criteria for a technological process, technological method or equipment to be considered as a BAT generally include the following:

— minimal level of negative environmental impact;
— cost efficiency of implementation and operation;
— use of resource-efficient and energy efficient methods;
— implementation period; and
— industrial introduction at two or more enterprises impacting the environment in Russia.

A list of industry-specific BATs is provided in 51 specialised handbooks, which have been developed by a BAT Bureau created in January 2015 and adopted by Rosstandart.

In terms of incentives, starting from 1 January 2020, manufacturers who implement BATs do not have to pay environmental fees for emissions and discharges (if within the permissible

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¹⁰ Russian Government Decree No. 1044 dated 11 October 2014.
norms). Moreover, companies shifting to BATs are eligible for financial support through a special fund granting loans for modernisation purposes.

**Energy efficiency**
Russia offers unique opportunities for investors who want to implement projects in the energy efficiency (“EE”) sphere and, more particularly, for representatives of countries that already possess experience of implementing EE and energy saving (“ES”) technologies.


To facilitate the efficient use of energy resources and to support and encourage ES, the EE Law provides for several groups of EE requirements applicable to various sectors, notably including the construction (EE requirements as to buildings, structures and installations) and the public sectors.

**EE requirements for buildings, structures and installations**
According to Russian EE rules, buildings, structures and installations (with only a few exceptions) must comply with the **obligatory requirements**. The Russian Ministry of Construction, Housing and Utilities is responsible for setting these requirements in accordance with the special rules adopted by the Russian Government. The EE requirements are to be revised at least once every five years and should cover:
- the maximum energy consumption limits for buildings/structures;
- requirements relating to the architectural, functional, technological, construction, engineering and technical solutions influencing the EE of buildings/structures; and
- requirements relating to specific construction elements of buildings/structures, applicable equipment, technologies and materials.

These EE requirements on design, construction, reconstruction and major repairs identify the parties (developers/builders/owners) responsible for implementation. Failure to comply with them may result in administrative liability.

**EE requirements for public sector**
One of the main priorities of the EE Law is the public sector. For instance, **energy consumption reduction targets** are set for publicly financed institutions. Moreover, companies with

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16 A “per breach” penalty for company officials at the rate of RUB 20,000 - 30,000 (EUR 286 - 429); for individual entrepreneurs – RUB 40,000 - 50,000 (EUR 572 - 715); for legal entities – RUB 500,000 - 600,000 (EUR 7,150 - 8,580).
state participation and companies carrying out regulated types of activities are also obliged to adopt and implement programmes aimed at increasing EE.

All purchases by state or municipal clients must be made in accordance with ES and EE requirements fixed by the Russian Ministry of Economic Development with the agreement of the Russian Ministry of Energy, the Russian Ministry of Industry and Trade, and the Russian Federal Anti-monopoly Service. These requirements which concern the public procurement of certain types of goods, works and services whose performance requires considerable amounts of energy consumption, include, in particular:

— limits on energy consumption; and
— technological solutions influencing the EE of goods/services ordered.

The federal authorities referred to above must monitor and analyse the EE of publicly procured goods, works and services on an annual basis, and they must prepare annual proposals for reviewing the EE requirements for public procurement.

Energy service agreements

Energy service agreements are entered into between a customer (private or public sector) and a contractor to provide works and services aimed at ES and greater EE.

These agreements must include the following mandatory conditions: (i) the volume of ES guaranteed by the contractor; (ii) the expiration date (which may not be less than the term necessary to achieve the ES set by the agreement); and (iii) other mandatory conditions required under Russian legislation.

The discretionary terms of an energy service agreement may include, among other things (i) a clause setting the price for the works and services, subject to the results attained or expected to be attained upon the performance of the contract (e.g. the value of ESs); and (ii) a clause stipulating the obligation of the contractor to install and commission energy meters.

Clauses containing the essential elements of an energy service agreement may be included in contracts of sale and purchase, supply and transport of energy resources (except natural gas not used as motor fuel). Model terms of these contracts have been approved by the Russian Ministry of Economic Development.

Energy audit mechanisms

Previously, the EE Law provided for two main types of energy audit: voluntary and obligatory. According to Federal Law No. 221-FZ\(^\text{17}\), there now is only one type of energy audit, namely voluntary.

Energy audits may only be conducted by companies and individual entrepreneurs who are members of self-regulated organisations. The audit should be aimed at:
- collecting objective data on the volume of energy used;
- defining EE indicators;
- defining the ES potential and increasing EE; and
- developing and evaluating a list of possible programmes which target EE increase.

The results of the energy audits must be reflected in an energy passport comprising information on the presence of energy meters, the volume of energy used and the variations of such volumes, etc. Copies of energy passports are forwarded to the Russian Ministry of Energy which is responsible for processing, systematising and analysing the information contained in these passports.

Instead of obligatory energy audits as provided earlier by the EE Law, state and local authorities as well as state-owned and municipal institutions now have to submit annual declarations of electric power consumption.

Incentives
In order to encourage private investors to participate in the EE programme, the EE Law proposes a range of financial/tax incentives.

Such incentives for commercial companies include, in particular:
- investment tax credits of up to 100% for companies investing in EE and ES technology;
- accelerated depreciation of assets categorised as having high EE or assets classified in the top EE class ("Qualifying Assets");
- three-year corporate property tax exemption on newly accounted for Qualifying Assets; and
- partial compensation of interest on loans granted by Russian banks for the purpose of investing in ES and increased EE technology.

Renewables
State policy
Since the adoption in 2009 of the Russian Energy Strategy to 2030, the Russian legal and regulatory framework has improved but still remains somewhat inconsistent, with the renewable energy sources ("RES") generation target being revised several times.

A Government Ordinance in 2009 set a target of 4.5% by 2020, excluding large hydropower plants of more than 25MW. A Government Ordinance in July 2015 shifted this target to 2024.

The above target corresponds to approximately 5.4GW of newly installed RES capacity (excluding large hydropower plants) by 2024, and is to be achieved using three renewable technologies:
solar, small hydro and wind, with the latter covering the major share of approximately 3.3GW.

As of 1 January 2019, according to the Russian Ministry of Energy, hydro, solar and wind power account for 20.3% of the country’s total installed power capacity of about 243.24GW.

The Russian legal and regulatory framework sets the rules on wholesale and retail energy trading, and offers certain incentives.

Subsidy scheme and tariffs
A so-called “premium scheme” applied to the wholesale prices for RES generated electricity, was introduced in 2007 by an amendment to Federal Law No. 35-FZ “On Electricity” dated 26 March 2003 (the “Federal Electricity Law”). However, largely due to the consumer price concerns and legal difficulties with developing a clear implementation mechanism, this price scheme, which would have been equivalent to a feed-in tariff, has never been put in practice.

In 2011, another support mechanism was introduced by the Federal Electricity Law: the promotion of RES through the capacity market. This scheme aims to ensure the financial viability of investments into renewables by concluding “Capacity Supply Agreements” with RES project developers.

The legal framework for this scheme was further developed in 2013 under Government Decree No. 449 (‘Decree 449”). Decree 449 establishes the regulatory mechanisms for selecting new RES projects and for their supply agreements. Under a capacity supply agreement, the grid company (Distribution System Operator) undertakes to purchase electricity from RES-generation facilities in the relevant region in order to compensate for transmission losses. The Russian regulatory body, the Market Council, introduced regional incentive schemes for qualifying RES projects. These projects enjoy long-term tariffs, which aim to guarantee returns on investment over 15 years. The capacity to be produced by such facilities is selected by way of annual tenders for renewables at a price that is usually several times higher than the price for existing conventional capacity.

More specifically, the bidders must provide a technical description of the project, including the percentage of localisation (local content) and project financing/guarantee structures. On that basis, the trading system administrator will select the winning bids, and a relevant RES capacity supply agreement will be signed. After completion of the construction, the authorities check that the generating facility meets certain requirements, such as those relating to the localisation of the equipment installed on the generating facility.

Various other financial, legal and tax incentives are available at the local, regional and federal levels, depending on the specifics of a particular RES investment project (e.g. region of investment and degree of localisation, type of capital expenditure, legal and project financing structure such as a SPIC – please see relevant section above for more details).

However, although this is a significant step towards the creation of a regulatory framework designed to promote clean energy production in Russia, there are still restrictions. Firstly, this scheme is only applicable to RES generation facilities eligible for the wholesale market (5MW capacity or more). Secondly, it does not allow the promotion of renewable energy technologies in the regions of Russia that have fully regulated tariff systems and the more isolated regions, where the deployment of renewables is economically feasible and supported by the availability of renewable resources. Thirdly, and above all, only projects in which a certain percentage of Russian technology and locally-produced components have been used (the so-called “local content requirement”) may qualify for the purposes of favourable pricing regime. For example, for 2020 to 2024, for wind projects, the required degree of localisation is equal to 65% and, for solar projects, it is 70%21. A Government Decree22 and an Order23 of the Russian Ministry of Industry and Trade provide the local content requirements for each type of RES, and also provide the formula to calculate a relevant degree of localisation. This is a key condition to ensure project bankability and thus sustainability, as a reduction factor is applied to tariffs for projects without the required degree of localisation (35% for solar power and 45% for wind, small hydro and waste treatment power sources)24.

Recent developments
The Russian Market Council, based on amendments to the Rules of the Wholesale Electricity and Capacity Market25, launched in 2019 an annual tender for the construction of facilities generating electricity from RES as follows: 78.1MW of wind, 5.6MW of solar and 229.832MW of small hydro projects. The winners got 15-year capacity supply agreements under Decree 449.

Only three projects were selected in 2019. This tender was less attractive than the one held in 2018, when more than 1.2GW were tendered. This is because low volumes were proposed to bidders in 2019. At the beginning of 2019, more than 90% of the targeted capacity under the current programme26

24 Decree 449.
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(which is covering the period up to and including 2024) had already been awarded to various market participants, mostly in wind and solar energy projects.

The market is now awaiting new regulations regarding the period beyond 2024. It is unclear whether the renewable energy sector will receive state support after the expiry of the current incentives.

That said, most market participants are confident that the Russian Government will continue to support the RES market and the current programme will be extended until 2035.

However, the exact volumes are not defined yet.

Russian green certificates could be used to supplement the existing incentive structure. This is currently under discussion. It is envisaged that, by selling these green certificates, consumers could reduce their total amount of payments for capacity under the current support mechanism of capacity supply agreements. As for power suppliers, the green certificates could act as a source of return on their investment.

Apart from the wind and solar focus, in 2017-2018 Russia introduced a set of legislative amendments aiming to extend the existing renewable energy scheme to energy-from-waste facilities. Currently only the Republic of Tatarstan and the Moscow Region are included in the list of Russian regions where such facilities are to be built. In 2018, two new Russian regions were added to the list: the Krasnodar Krai (55MW) and the Stavropol Krai (55MW). However, no bids were submitted for these new projects and the 2018 tender for the construction of waste-burning plants was not successful. In 2019, no tender was announced at all.

**Outlook**

Russia has the potential to increase the use of all types of renewable energy technologies. Historically (since the Soviet period), it has a well-developed hydropower segment. Its bioenergy potential is also significant, as this technology is used in the agriculture, forestry, infrastructure and trade sectors. But today, the Russian renewable energy policy is focusing on accelerating the deployment of wind and solar photovoltaic.

More generally, there are a number of drivers in Russia that explain the increasing focus on renewables and decentralised energy. New energy solutions are seen as a way to modernise the power system, but they are also a part of a broader socio-economic development model to achieve higher living standards. In addition, a decentralised electricity generation system is of interest to Russia’s remote and distant regions, as it is economically

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Russia offers unique opportunities for investors who want to implement energy efficiency and renewables projects, particularly for investors with experience of implementing technologies in these spheres.

impractical to extend high-voltage electricity lines to these regions.

Furthermore, decentralised electricity generation is also interesting and attractive for industrial complexes. It offers opportunities for them and allows them to become more independent from the centralised power system. The current situation of relatively high electricity prices is another reason to explore new energy solutions.

Finally, in response to the EU and US sanctions, Russia’s local content requirements have become one of its main economic policy drivers supporting inbound investments and technology transfers to develop local innovative technologies, including in the RES sector.

Please see the Introduction on page 12.