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Market Watch (vol. 3.0)

St. Petersburg region (Russia) urban cleantech sector

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Cata3Pult
FINNISH RUSSIAN PPP
CATALYZING NEW GREEN BUSINESS

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Helsinki
Helsingfors

Хельсинки

CBC 2014-2020
SOUTH-EAST FINLAND - RUSSIA

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the Russian Federation and
the Republic of Finland.

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I would like especially express gratefulness to:

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Kindly appreciated for provided help! Anyway, the responsibility for possible mistakes and misunderstandings are on my side.

I hope that my passion and intent to provide helpful information to understand St. Petersburg environment for non-local businesses is partly achieved. Open to constructive comments and corrections!

27.5.2020
Evilina Lutfi (Green Net Finland)

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Abbreviations

Administrative structures and organizations from national to local level

RF	Russian Federation
SPb	St. Petersburg
LO	Leningrad oblast
MF	municipal formation
LA	local administration
MC	municipal council
LSGB	local self-governance bodies
SED	socio-economic development
GRP	Gross Regional Product
SEP	State Executive Power
CCPA	Committee for City Planning and Architecture
CPR	Committee on Property Relations
CT	Committee on Tariffs
CH	Committee on Housing
CEE	Committee on Energy and Engineering
CIP	Committee on City Improvement
CIPIT	Committee on Industrial Policy, Innovation and Trade
CNUEP	Committee on Natural Use, Environmental Protection and Safety
SBI	state budgetary institution
SUE	state unitary enterprise
MUE	municipal unitary enterprise
FKKO	Federal Waste Class Catalogue
TEK	Fuel and Energy Complex
CSRREP	Common State Register of Real Estate Properties

Development of St. Petersburg communal housing properties

Major repair	Regional Programme of St. Petersburg on the Major Repair of Common Properties of the Block of Flats Buildings
TSZH	housing association
ZHK	housing cooperative
MCBF	management company of block of flats buildings
SRO	self-regulated organization

PPP business models for real estate market

CA	Consession Agreement
ESCO	Energy Saving Contract (Agreement)
LA	Leasing Agreement
STCCH	Scientific and Technical Council in the field of housing and communal services of St. Petersburg under the Committee on Housing

Relevant parts of the Russian Federation legislation

FL	Federal Law
LC	Land Code
CC	Civil Code
BHC	Building and Housing Code
EEF	Energy and Eco Efficiency
HS	Housing Sector

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1. Preface

This report is the volume 3.0 of the Green Net Finland's publications on St. Petersburg Cleantech Market Watch. Volume 1.0 and volume 2.0 are published in GNF's web-site in 2018. The work is constructed under the Cata3Pult – Finnish Russian Public Private Partnership catalysing green business – project. The Cata3Pult project is part of the South-East Finland – Russia CBC Programme, which is the joint funding instrument of the European Union, the Russian Federation and the Republic of Finland.

Cata3Pult - Finnish Russian Public Private Partnership catalysing green business	
Budget	800 000 €
Duration	1.6.2019 – 31.5.2022
Partners	City of Lappeenranta (Lead Partner)
	Green Net Finland
	Metropolia University of Applied Sciences
	Environmental office KOSMOS LLC
	Non-commercial Partnership "St. Petersburg House Property Owners Association"
Funding	South-East Finland – Russia CBC Programme City of Helsinki

The main objective of the Cata3Pult project is to contribute to economic and environmental development, to enhance regional business competitiveness through cross-border Public-Private cooperation and to catalyse green solutions development in the Programme area by attracting businesses to invest, locate and operate in the Programme area.

The purpose of these market watch reports is to provide market knowledge and to develop profound understanding of the St. Petersburg operational environment for the interested businesses.

Distinctive for this report is that the information is gathered from local references and sources provided so far mainly in Russian. Some information is based on discussions with the key target groups in St. Petersburg and Finland. Interest and information needs have been discussed and identified to reach an understanding of the information needed in this kind of market watch.

The main objective of this volume is to provide updated, accurate and supportive content on St. Petersburg macro-region urban cleantech market to help maintaining successful dialogue on Public Private Partnership business models between Finnish- and Russian-speaking persons.

NB! Broad and variously understood term “urban cleantech” itself is in this report confined to substantial focus of the Cata3Pult project: eco, energy and waste efficiency of community housing sector, green logistics & mobility, and circular economy.

1.1 Why so much attention to Glossary and methodology on collecting it?

As a part of the Cata3Pult project, it is planned to organize the work of the Finnish–St. Petersburg expert groups in the following environmental areas:

1. Improving the energy and eco-efficiency of the private housing stock of St. Petersburg by reducing the consumption of natural resources for lighting and heating, and by improving the efficiency of solid waste management.

2. Reducing the environmental load from transport both in St. Petersburg and in Southeast Finland.

3. Reducing the consumption of primary natural materials by putting the circular economy principles into practice.

The terminology associated with the above topics has not yet been established in any of the three program region languages. Not to mention the presence of cross-field harmonization in the use of terms in business, education, and public authorities’ sectors. In addition, for a term used in one language a direct counterpart is not necessarily found in another language.

As an attempt to help organizations to concretise collaboration, and to gather together definitions of the terminology used in discussion about environmental and cleantech issues both in Finland and Russia, Cata3Pult project team experts began to compile a glossary, since it was clear that the ‘definition management’ of the terms needed a special attention.

The project team of Cata3Pult took part in developing the glossary based on the observations in the communication processes. The author of this watch has collected the key terms in Russian, Finnish and English into separate *Attachment 1: Mini-glossary on urban cleantech Eng-Fi-Ru*.

The Methodology of collecting the content had a practical approach and the work was conducted as follows: if some of the project team member observed difficulties with communicating in meetings, with preparing materials for publications and with working on documents, the difficult or ambiguous words/terms were entered into GoogleSheet Cata3Pult Ru-Fi-Eng Communication Support Tool.

NB! To develop further the content of the glossary and its’ quality, we are kindly ask to give possible feedback via comment tool in the GoogleSheet. Updates will be made gradually, and the next updated version of the glossary and Market Watch (vol. 4.0) is planned to be published in spring 2022.

1.2 Economic development of St. Petersburg

Overview of the economic development of St. Petersburg determined by Gross Regional Product (Further – ***GRP***; Origin: *Региональный Валовый Продукт – РВП*) is presented in Figures 1 and 2.

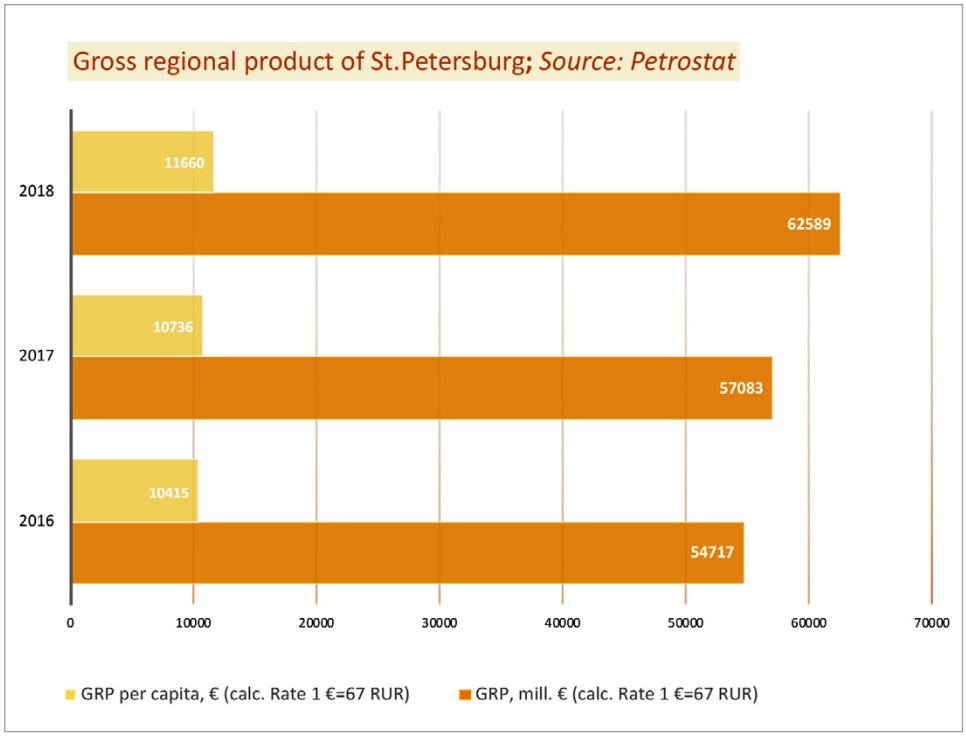


Figure 1. GRP of St. Petersburg – total amount and per capita.
Source: https://petrostat.gks.ru/storage/mediabank/SPB18.pdf; (Accessed on 20.3.2020)

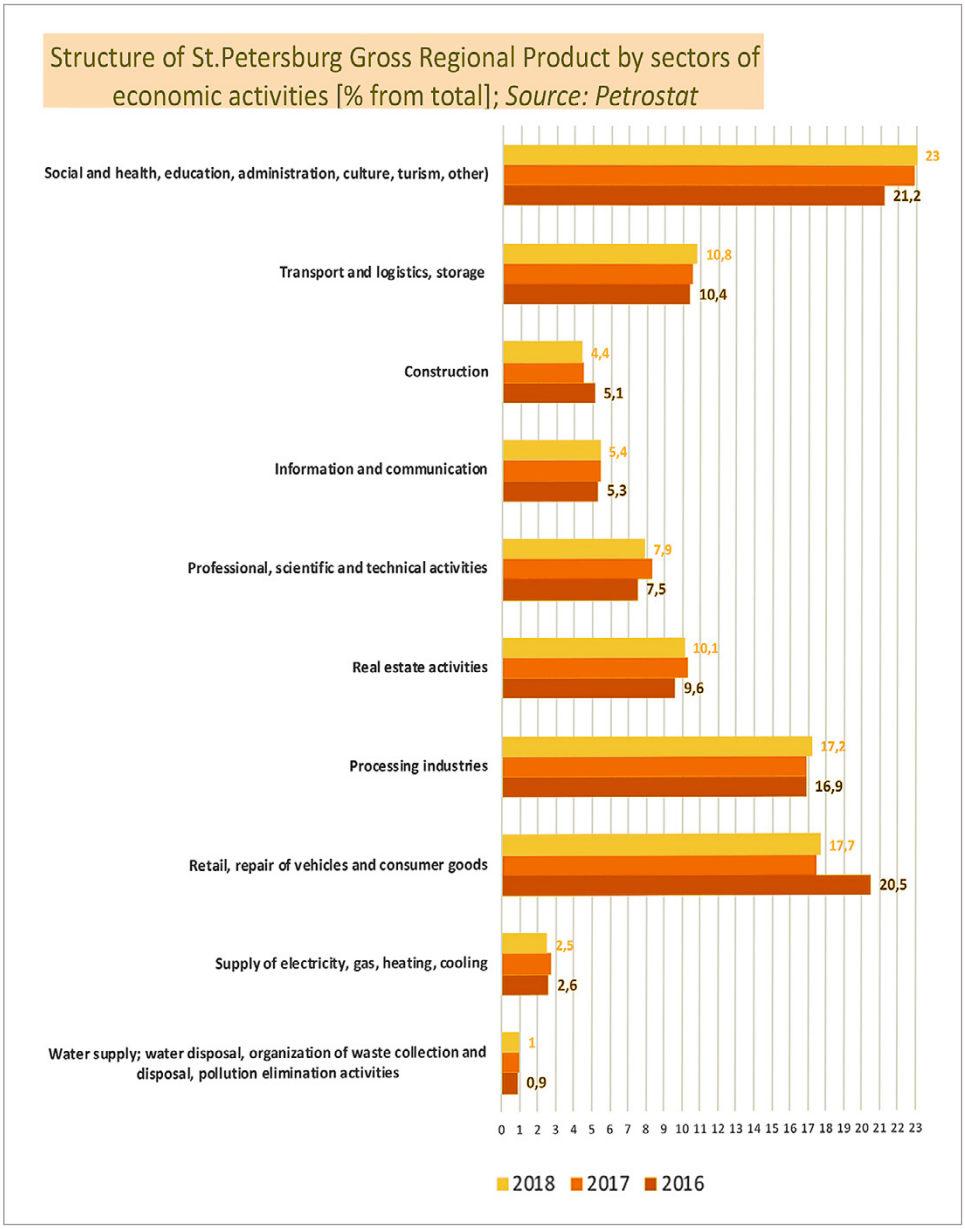


Figure 2. Structure of St. Petersburg GRP by sectors of economical activities;
Source: https://petrostat.gks.ru/storage/mediabank/SPB18.pdf; (Accessed on 20.3.2020)

Characteristic Indicators of the status of economy and social sphere of municipal formations of St. Petersburg could be extracted as *Municipality Passport* from a web-resource of Federal State Statistic Service (Further – ***FSSS***; Origin: *Паспорт муниципального образования, Федеральная Служба Государственной Статистики*). Direct link to a list of 111 municipal formations of St. Petersburg (Further – ***MF of SPb***): https://www.gks.ru/scripts/db_inet2/passport/munr.aspx?base=munst40 (Accessed on 20.3.2020). More information about the municipal formations of St. Petersburg is presented in the chapter 6.3. As an example, in Figure 3 are presented some figures from the Budgets of the City of Kolpino in 2016 – 2018 yy.

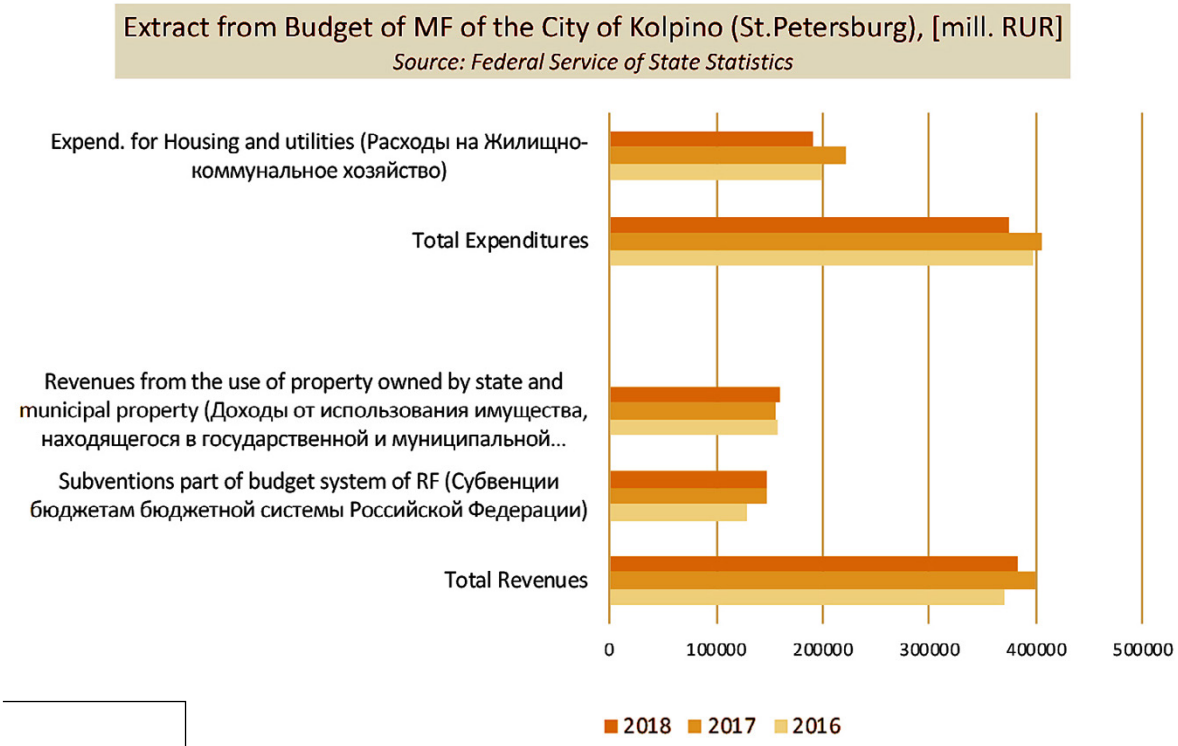


Figure 3. Extract from Budgets of the City of Kolpino 2016-2018. Source: Passport of MF on the Federal Service of State Statistics https://www.gks.ru/scripts/db_inet2/passport/munr.aspx?base=munst40, Tables: https://www.gks.ru/scripts/db_inet2/passport/table.aspx?opt=40342000201620172018; (Web-resource accessed and Extract created on 20.3.2020)

Table 1. Calculations of some shares from the Extract from Budgets in 2016 – 2018 yy. of the municipal formation of City of Kolpino (St. Petersburg).

	2016	2017	2018
Share of housing and utilities in total expenditures	50%	55%	51%
Share of subvention from the state in total revenues	35%	37%	38%
Share of revenues from the use of property owned by state and municipal property	43%	39%	42%

1.3 About the structure of this report

The most relevant parts of the St. Petersburg macro-region urban cleantech market and operational environment are introduced and explained in the following chapters:

- the relevant administrative structures and organizations from national to local level (Ch 2)
- the Regional Geographic Information System of St. Petersburg – RGIS and Cadastral Register (Ch 3)
- the development of St. Petersburg communal housing properties (Ch 4)
- the framework of energy efficiency improvement in existing housing stock of St. Petersburg (Ch 5)
- the PPP business models for real estate market (Ch 6)
- the relevant parts of the Russian Federation legislation (Ch 7)

Finally, some study cases for business development are presented.

In addition, among the text relevant terminology is explained in special info boxes.

2. Overview of administrative structure of Russian Federation, North-West Russia and St. Petersburg

2.1 Structure of Russian Federation

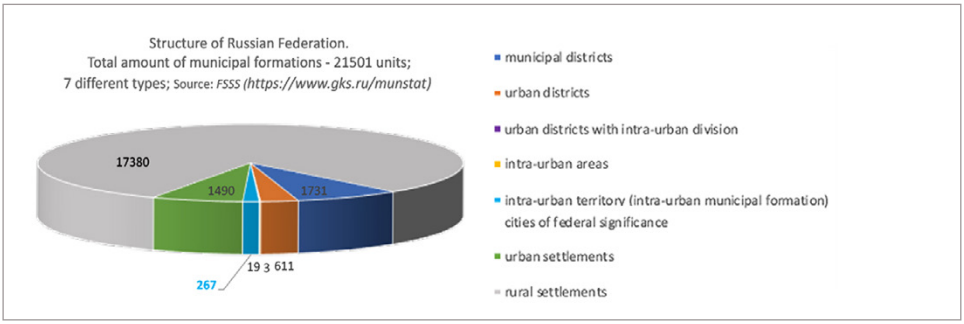


Figure 4. Administrative structure of Russian Federation.
Source: https://www.gks.ru/munstat; (Accessed on 20.3.2020)

In Russian Federation is ongoing a process of forming local governance. Figure 5 is presenting types of activities under this process. There are four types of such activities. St. Petersburg's figures are in the line *Municipal Unitary Enterprises (MUEs)*. According to statistics, there are 11 MUEs in St. Petersburg.

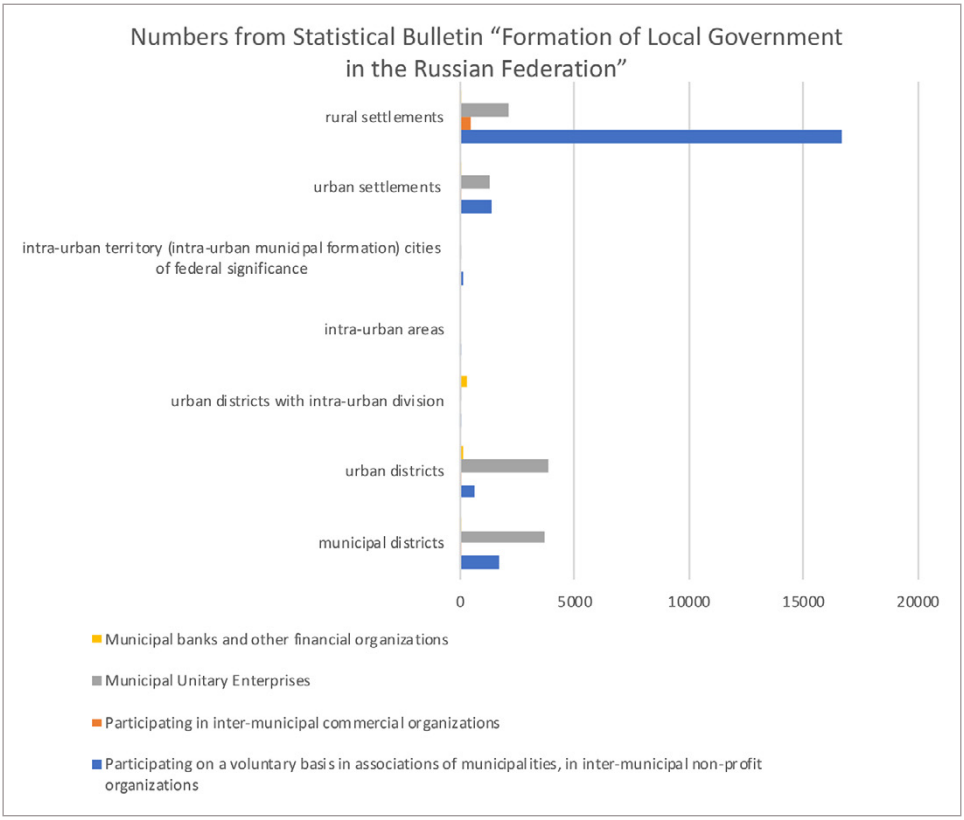


Figure 5. Types and amount of activities under the process of forming local governance in Russian Federation.

2.2 Hierarchy of Executive power bodies in Russian Federation

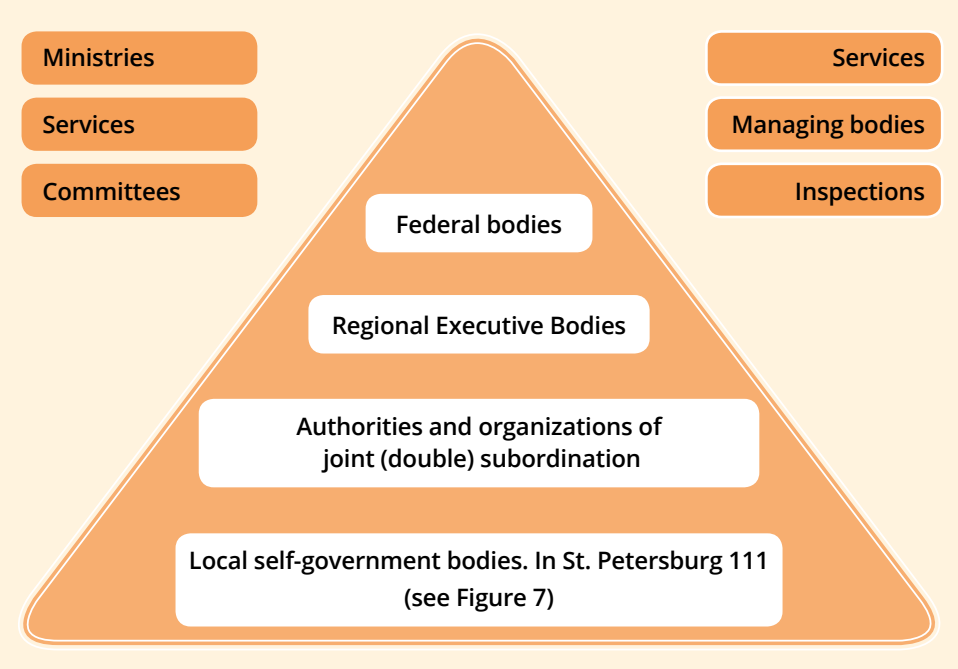
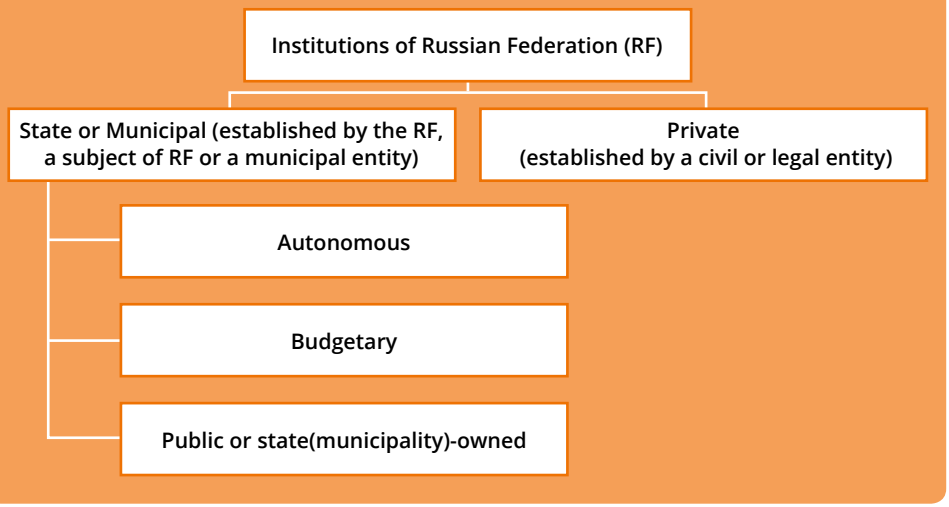


Figure 6. Hierarchy of Executive power bodies in Russian Federation.
Source: https://gu.spb.ru/orgs/classifier/2103/; (Accessed on 6.3.2020)

INFOBOX 1

Institutions in Russian Federation – budgetary, public, private

In accordance with Civil Law of Russian Federation, an institution may be:



Definitions of "budgetary" (in origin *"бюджетное"*) and "public" (in origin *"казенное"*) institutions differ in utilizing/spending their income.

- **Budgetary institutions**
  - Carry out income-generating activities and use income to their discretion, without listing them in the state (or a municipal) budget revenue.
  - Examples of budgetary institutions *are schools, kinder gardens*. In construction connection premises of those are called *"objects of social infrastructure"*.

- **Public institutions**
  - Are obligated to transfer all their revenue from income-generating activities (after paying taxes and fees) to the corresponding budget (state or municipal).
  - Examples of public institutions are *State Unitary Enterprises (SUEs)* (see Chapter 5.4) or *enterprises of energy- and water-supply, which are operate or economically manage objects for generation and distribution of heat and electrical energy, centralized systems of hot water supply, cold water supply and (or) drainage.*

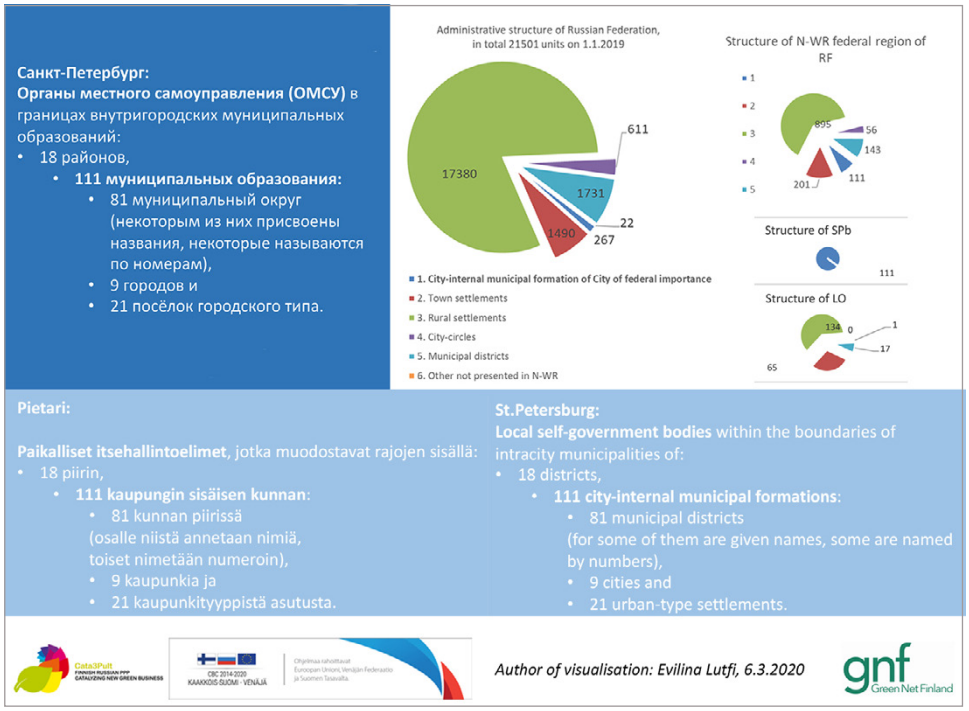


Figure 7. Ru-Fin-Eng overview of administrative structure of St. Petersburg.

The territory of St. Petersburg is divided into 18 districts. Within the boundaries of the districts there are 111 municipalities, 81 municipal districts (some of them are given names, while others are distinguished by numbers), 9 cities and 21 urban-type settlements. For more details see figure 7.

2.3 Relevant Committees of St. Petersburg and their subordinate institutions – SUEs and SPIs

The Committees' role is Executive Power Body of the State Power of Russian Federation.

There are 35 different Committees in the Administration of St. Petersburg. Each Committee has the following two responsibilities and jurisdictions:

1. **Ensuring the implementation of State Policy and carry out Public Administration in the dedicate field of responsibility**
2. **Coordinating the activities of other Executive Bodies of State Power in St. Petersburg in this field.**

Next, in table 2, the Committees of St. Petersburg with relevancy to Cata3Pult focus areas are presented in more detail.

Table 2. Descriptions of relevant to Cata3Pult focus areas Committees of St. Petersburg.

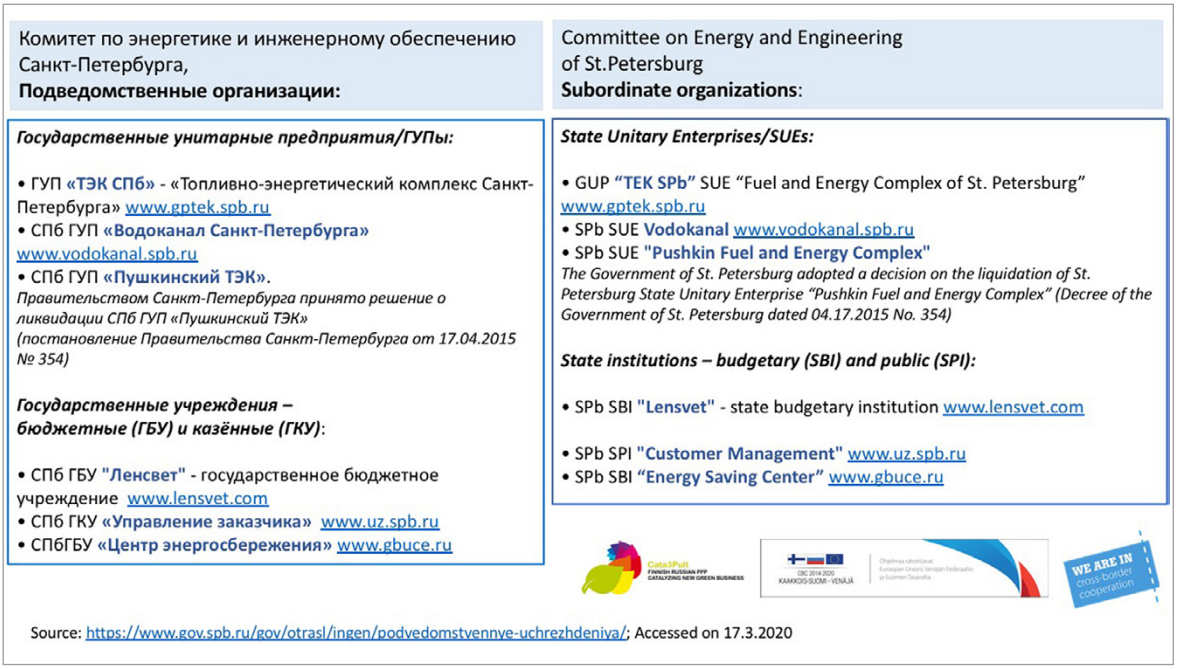
Abbreviation	Full name EN	Full name RU	Main responsibilities and operation areas
CH	Committee on Housing	Жилищный комитет	Maintenance and repair, including the capital, housing and non-residential fund of St. Petersburg, as well as the reform of housing and communal services https://www.gov.spb.ru/gov/otrasl/gilfond/ (16.3.2020)
CI	Committee on the Improvement of St. Petersburg	Комитет по благоустройству	Landscaping: gardening, forestry, maintenance of roads and other landscaping facilities, waste management. (onko loppuosa tärkeä?: and also coordinates the activities of other executive bodies of state power) https://www.gov.spb.ru/gov/otrasl/blago/ (16.3.2020)
CT	Committee on Tariffs	Комитет по Тарифам	Tariff regulation in the electric power industry, heat power system, in the field of water supply and sanitation, as well as in the transport complex. In addition, the Committee regulates the prices of medicines included in the list of essentials and monitors and approves investment and production programs of regulated organizations https://www.gov.spb.ru/gov/otrasl/energ_kom/ (16.3.2020)
CUPA	Committee on Urban Planning and Architecture	Комитет по градостроительству и архитектуре	Urban planning and architecture, the formation of the architectural appearance of St. Petersburg https://www.gov.spb.ru/gov/otrasl/architecture/ (16.3.2020)
CPR	Committee on Property Relations	Комитет имущественных отношений	Management and disposal of state property of St. Petersburg, control over its use and safety, as well as in the field of land relations Operating RGIS https://www.gov.spb.ru/gov/otrasl/kio/ (16.3.2020)

CIPIT	Committee on Industry Policy, Innovations and Trade	Комитет по промышленной политике, инновациям и торговле	Industrial and innovative policies, the agro-industrial complex, the development of entrepreneurship, including medium and small businesses, the consumer market (wholesale and retail trade, catering, consumer services, funeral services and burial in St. Petersburg), licensing activities, ensuring food security https://www.gov.spb.ru/gov/otrasl/c_industrial_and_trade/ (17.3.2020)
CEE	Committee on Energy and Engineering	Комитет по энергетике и инженерному обеспечению	Engineering and energy complex and engineering infrastructure facilities.). 6 subordinate organisations or institutions; See below for more detail https://www.gov.spb.ru/gov/otrasl/ingen/ (17.3.2020)
SNUEP	Committee on Nature Use, Environmental Protection and Ecological Safety	Комитет по природопользованию, охране окружающей среды и обеспечению экологической безопасности	Environmental management, environmental protection and environmental safety 6 subordinate organisations or institutions; See below for more detail https://www.gov.spb.ru/gov/otrasl/ecology/; (17.3.2020)

Since CEE and SNUEP have special relevance they are presented in more detail:

The Committee on Energy and Engineering are:

- Ensuring the sustainable functioning and development of the engineering and energy complex and engineering infrastructure facilities of St. Petersburg
- Implementation of state policy in the field of energy in the territory of St. Petersburg
- Formation of the fuel and energy balance of St. Petersburg and the limits of consumption of fuel and energy resources and water by budget organizations
- Organization of work on the preparation and conduct of the heating season
- Development and implementation of measures to eliminate accidents at the facilities of energy and engineering support systems of St. Petersburg



Комитет по энергетике и инженерному обеспечению Санкт-Петербурга, **Подведомственные организации:**	Committee on Energy and Engineering of St.Petersburg **Subordinate organizations**:
Государственные унитарные предприятия/ГУПы: • ГУП **«ТЭК СПб»** - «Топливно-энергетический комплекс Санкт-Петербурга» www.gptek.spb.ru • СПб ГУП **«Водоканал Санкт-Петербурга»** www.vodokanal.spb.ru • СПб ГУП **«Пушкинский ТЭК»**. *Правительством Санкт-Петербурга принято решение о ликвидации СПб ГУП «Пушкинский ТЭК» (постановление Правительства Санкт-Петербурга от 17.04.2015 № 354)* ***Государственные учреждения – бюджетные (ГБУ) и казённые (ГКУ)***: • СПб ГБУ **"Ленсвет"** - государственное бюджетное учреждение www.lensvet.com • СПб ГКУ **«Управление заказчика»** www.uz.spb.ru • СПбГБУ **«Центр энергосбережения»** www.gbuce.ru	***State Unitary Enterprises/SUEs:*** • GUP **"TEK SPb"** SUE "Fuel and Energy Complex of St. Petersburg" www.gptek.spb.ru • SPb SUE **Vodokanal** www.vodokanal.spb.ru • SPb SUE **"Pushkin Fuel and Energy Complex"** *The Government of St. Petersburg adopted a decision on the liquidation of St. Petersburg State Unitary Enterprise "Pushkin Fuel and Energy Complex" (Decree of the Government of St. Petersburg dated 04.17.2015 No. 354)* ***State institutions – budgetary (SBI) and public (SPI):*** • SPb SBI **"Lensvet"** - state budgetary institution www.lensvet.com • SPb SPI **"Customer Management"** www.uz.spb.ru • SPb SBI **"Energy Saving Center"** www.gbuce.ru

Source: https://www.gov.spb.ru/gov/otrasl/ingen/podvedomstvennye-uchrezhdeniya/; Accessed on 17.3.2020

Figure 9. Subordinate organizations under the Committee on Energy and Engineering (CEE) of St. Petersburg. Source: https://www.gov.spb.ru/gov/otrasl/ingen/podvedomstvennye-uchrezhdeniya/; (Accessed on 17.3.2020)

The Committee on Natural Use, Environmental Protection and Environmental Safety:

Комитет по природопользованию, охране окружающей среды и обеспечению экологической безопасности Санкт-Петербурга, **Подведомственные организации**:	Committee on Nature Use, Environmental Protection and Environmental Safety of St.Petersburg, **Subordinate organizations**:
•**СПб ГКУ** «Дирекция по обеспечению безопасности гидротехнических сооружений Санкт-Петербурга ***«Ленводхоз»*** •**СПб ГУП** по предупреждению и ликвидации аварийных разливов нефти ***«Пиларн»*** •СПб многопрофильное природоохранное ГУП ***«Экострой»*** •СПб геологическое ГУП Специализированная фирма ***«Минерал»*** •ГКУ «***Дирекция особо охраняемых природных территорий*** Санкт-Петербурга» •СПб ГКУ «***Дирекция мелиоративных систем и охраны окружающей среды*** Санкт-Петербурга»	• St. Petersburg/SPb **State Public Institution/SPI** "Directorate for ensuring the safety of hydraulic structures of St. Petersburg ***Lenvodkhoz*** • SPb **State Unitary Enterprise/SUE** for the Prevention and Response of Oil Spill Accident ***Pilarn*** • SPb multidisciplinary environmental SUE ***Ecostroy*** • SPb Geological SUE Specialized company ***Mineral*** • SPI ***Directorate of Specially Protected Natural Areas*** of SPb • SPb SPI ***Directorate for Land Reclamation Systems and Environmental Protection*** of St. Petersburg

Figure 10. Subordinate organisations under the Committee on Natural Use, Environmental Protection and Environmental Safety (SNUEP) of St. Petersburg. Source: https://www.gov.spb.ru/gov/otrasl/ecology/podvedomstvennye-uchrezhdeniya/; (Accessed on 17.3.2020)

INFOBOX 2

Unitary enterprise – the right for economic management or operational management

A unitary enterprise is a commercial organization that is not endowed with the right of ownership of the property assigned to it by the owner. The property is owned by the state (SUE) or a municipality (MUE), and this property is indivisible and cannot be distributed among deposits (shares), including among employees of the enterprise. Unitary enterprises possess the property assigned to them by the right of economic management or operational management. https://lawbooks.news/pravovedenie_818/gosudarstvennyie-munitsipalnyie-unitarnyie.html; (Accessed on 11.7.2019)

The SUEs and MUEs are directly connected to executive power bodies. In visualisation x the connections of St. Petersburg SUEs to the relevant Committees are presented.

2.4 Structure and responsibilities of Administrative District

The City of St. Petersburg consists of 18 Administrative Districts (see figure 11).

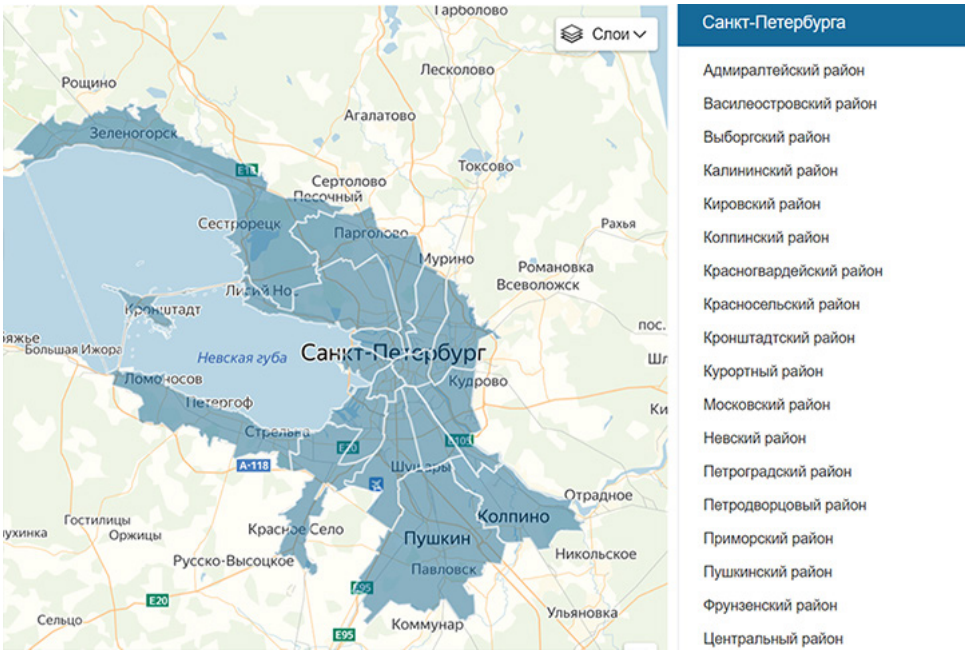


Figure 11. Administrative Districts of St. Petersburg and Kolpinsky district on the map.

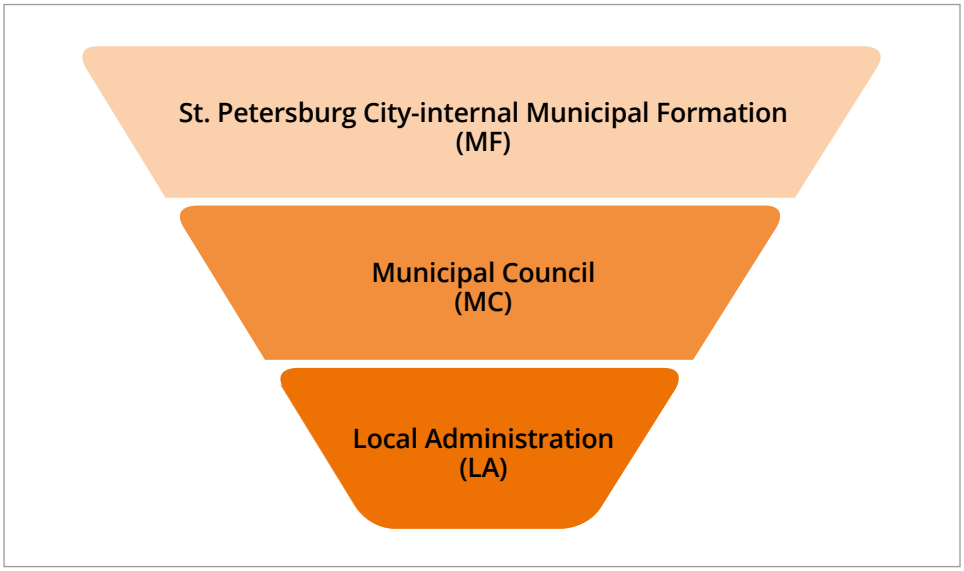


Figure 12. Structure of managing bodies within Municipal Formation (MF) of St. Petersburg.

2.5 Structure of Local Administration (LA) of the City of Kolpino and municipal services for citizens

According to the Charter of the St. Petersburg City-internal municipal formation of the City of Kolpino (In origin: *"Из Устава внутригородского муниципального образования Санкт-Петербурга города Колпино"*; http://kolpino-mo.net/ustav_mo_g._kolpino) and its Article 34.1:

1. The Head of LA is a municipal employee ... appointed to a position under a contract concluded based on the results of a election process to fill a specified position, for the term of office/administration/apparat of the municipal Council (MC), which decided to appoint a person to the position...

2. Conditions of the contract for the Head ... are determined by the Provision approved by the MC, in terms of exercising the authority to resolve issues of local importance. Conditions of a contract... as regards the exercise of certain state powers transferred to the local administration by federal laws and the laws of St. Petersburg, are determined by the law of St. Petersburg.

Conditions of the contract of the Head of Local Administration of St. Petersburg City-internal municipal formation:

1. In terms of exercising the authority to resolve issues of local importance:

determined by the Provision approved by the Municipal Council

2. In terms of exercising of certain state powers transferred to the local administration by federal laws and the laws of St. Petersburg:

determined by the law of St. Petersburg

3. The order of the election process for the post of the Head is established by the MC.

   The total number of members of the election commission in MF is established by the MC. When forming a election commission, half of its members are appointed by the MC, and the other half by the Governor of St. Petersburg.

4. The contract with the Head of the LA is concluded by the Head of the MF.

5. The Head of LA is not entitled to engage in entrepreneurial and other paid activities, except for teaching, scientific and other creative activities. At the same time ... the activity cannot be financed exclusively at the expense of foreign countries, international and foreign organizations, foreign citizens, or stateless persons, unless otherwise provided by an international agreement of RF or the legislation of RF.

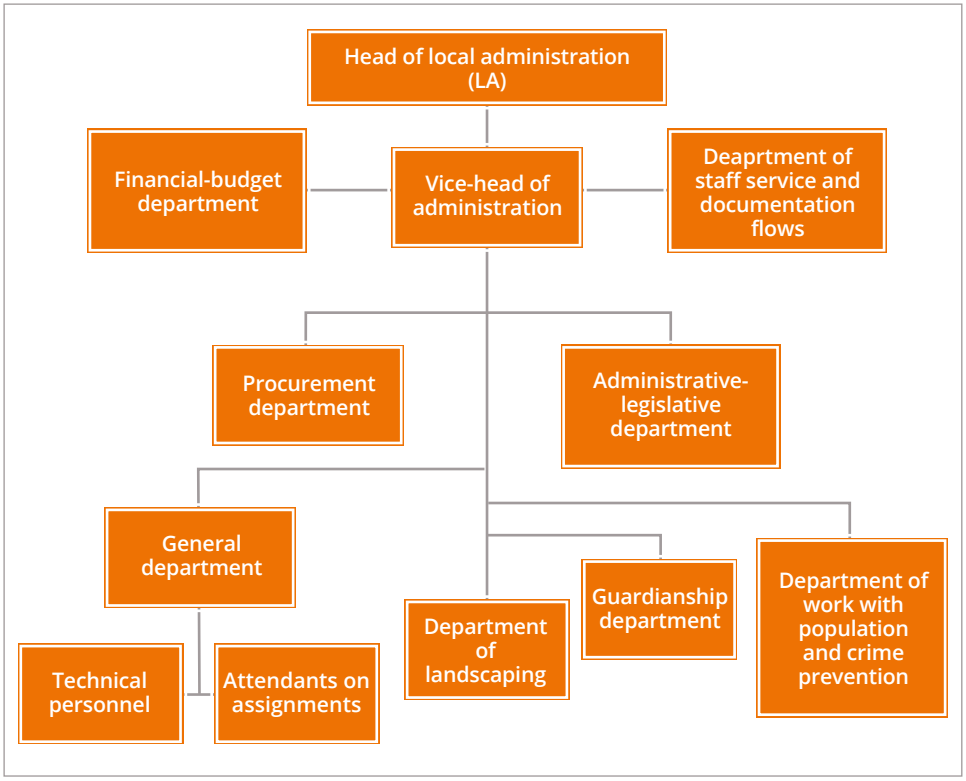


Figure 13. Structure of the Local Administration of the MF of the City of Kolpino.

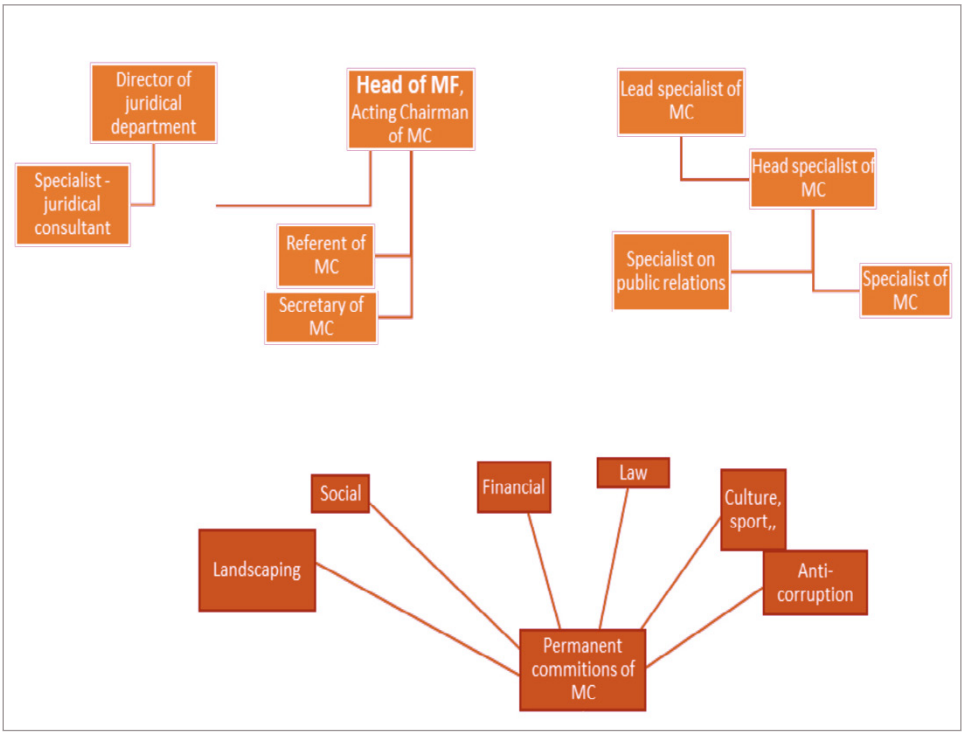


Figure 14. Structure of the Municipal Council (MC) of Municipal Formation (MF) of St. Petersburg – City of Kolpino

Municipal advising services of Local Administration (LA) to residents of Municipal Formation (MF) include:

- Providing advice to residents of the municipality … on the establishment of homeowners associations (Origin: *Предоставление консультаций жителям муниципального образования … по вопросам создания товариществ собственников жилья*).
- Providing advice to residents of the municipality … on the formation of land plots on which apartment buildings are located (Origin: *Предоставление консультаций жителям муниципального образования … по вопросам формирования земельных участков, на которых расположены многоквартирные дома*).

Source: *http://mo-gorodpushkin.ru/d/857005/d/12-30rpmsoperechnemunitsipalnykhuslug.pdf* ***(Accessed on 11.7.2019)***

3. Regional Geographic Information System of St. Petersburg – RGIS and Cadastral Register or Rosreestr.net

The Geographic Information System of St. Petersburg (**RGIS**) (Origin: *«Геоинформационная система Санкт-Петербурга» (РГИС)*) is a regional geographic information system containing information about real estate and land management, which via the public access network provides the latest spatial data of state information resources of a constituent entity of the Russian Federation – St. Petersburg, such as:

- the state cadastral register of real estate,
- system for supporting urban development,
- water registry,
- monument conservation,
- environmental protection
- and others.

The operator of the RGIS and the authorized body for the provision and dissemination of information of this information resource in electronic and paper form is the Committee on Property Relations of St. Petersburg.

INFOBOX 3

Common State Register of Real Estate Properties (CSRREP)

Common State Register of Real Estate Properties (CSRREP)

The form of an extract from the CSRREP on the main characteristics and registered rights to the property has been approved by Order No. 378 of the Ministry of Economic Development of Russia of 20.06.2016. The content of the statement is quite logical and simple. The statement consists of 5 sections:

Section 1:	**"Information on the main characteristics of the property"**
Section 2:	**"Information on registered rights"**
Section 3:	"Description of the location of the land plot"
Section 4:	"Description of the location of the property"
Section 5:	"The layout of the premises, the parking space on the floor (floor plan)."

Section 1: Information about the main characteristics of the property:

- Type of property. For example, “construction” or “land plot”
- Cadastral number
- Cadastral quarter number
- Cadastral number assignment date
- Previously assigned state account number
- Address
- Area in square meters
- Main characteristic (for the construction)
- Readiness of the object under construction, %
- The main characteristic of the object under construction and its projected value
- Purpose. If the property is a premise, then the following shall be additionally indicated: the words “common property of the owners of the premises in a block of flats building”, if the premises relate to the common property of the owners of the premises in the building, the words “common property”, if the premises are in accordance with the laws of the Russian Federation on urban planning activity documents, including project documentation, is designed to service all other rooms and (or) parking spaces in the building.
- Number of floors, including underground floors. The total number of floors of a building or structure, including a comma, starting with the words “including underground”, the number of underground floors (floors with a floor level lower than the planned level of the earth more than half the height of the room) and levels in the basement are indicated.
- Number, type of floor where the premises are located, parking place
- Type of dwelling
- Year of commissioning upon completion of construction
- Year of completion of construction
- Cadastral value, rub. Information on the value of the cadastral value of the property used for the purposes stipulated by the legislation
- Cadastral numbers located within the land plot of real estate objects
- Cadastral numbers of other real estate objects within which the property is located
- Cadastral numbers of rooms, parking places located in a building or structure
- Cadastral numbers of real estate objects that are part of a single real estate complex as a property complex
- Cadastral number of a land plot, if the real estate objects included in a single real estate complex are located on the same land plot of land
- Land category
- Types of permitted use

- Information on the assignment of residential premises to a particular type of residential premises of a specialized housing fund, to residential premises of a socially hired house or a commercial-use hired house
- Status of the property record. “Information about the property has the status of” temporary “and the expiration date of the temporary nature of information about the property – in relation to the property, information of the EDR about which have the status of” temporary“; “The real estate object is removed from cadastral registration” and the date of its removal from the state cadastral registration is in respect of the real estate object, which ceased to exist;
- Special marks. The words “The common property of the owners of the premises in the block of flats building” shall be indicated in relation to the land plot relating to the common property of the owners of the premises in the building.
- Receiver of the extract

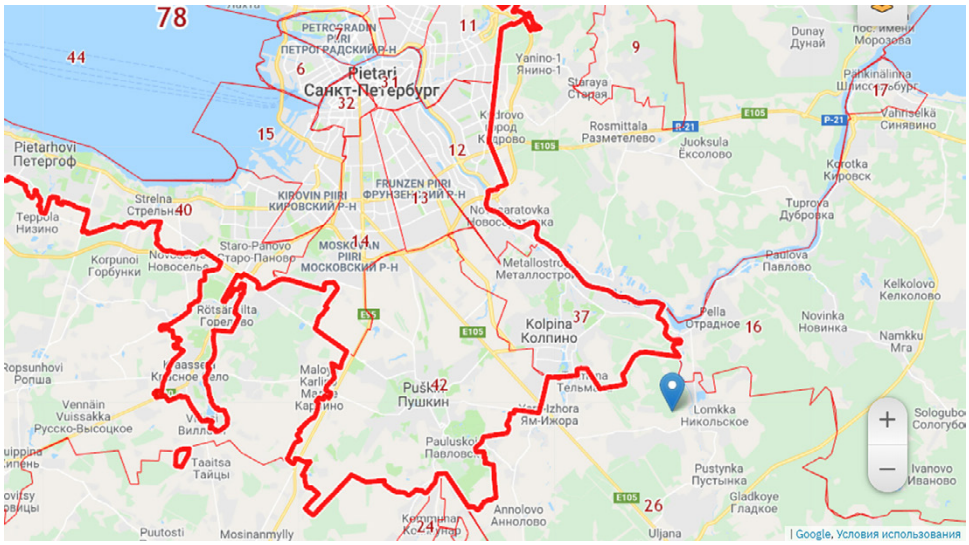
Section 2: Information on registered property rights:

- Holder/-s of ownership right. Full name for physical persons - in full or Name of the legal entity and its registration number. If there are several current records on the state registration of various types of real rights, in the corresponding subparagraphs the data on all rights holders are indicated. If property rights are not registered, but restrictions on the rights and encumbrances of the property (for example, rent) are registered, when federal law provides for such cases, the words “there is no information about the right holder” are entered.
- Type, number and date of state registration of the right. If the common ownership right is registered, the size of the share in the right is also indicated. If the right is restored on the basis of a judicial act recognizing the transaction as invalid or void and applying the consequences of such a transaction, the words “The right is restored by a court decision, the date of registration: _____ (the original date of registration of the right is indicated)
- Documents of argumentation
- Restriction of rights and encumbrance of a property (type, date of registration, number, period for which a restriction of rights and encumbrance is established, a person in whose favor a restriction of rights and encumbrance of the property is established, the basis of state registration). If there are more than one restriction of rights and encumbrances on the property (for example, mortgage and arrest), all information that is relevant at the time of issuance of the statement of restrictions on rights and encumbrances on the property is registered. If the restrictions on the rights and encumbrances of the property are not registered, the words “not registered” are entered.
- Information on the existence of a decision on the seizure of the property for state and municipal needs, Information on the implementation of the state registration of the transaction, the right to restrict the right without the consent of a third party or body required by law.

Cadastral Register or Rosreestr.net

In the cadastral register the St. Petersburg territory has number 78. Each city-internal municipal district (Further – city-district) of the St. Petersburg has own cadastral number. For example, Pushkin has number 42 and Kolpino – 37. Numbers of cadastral objects within Kolpino are starting with "78–37...". Further numbers are indicating the type of cadastral object and geographic location.

The Rosreestr's public cadastral map is open and free: https://rosreestr.net/kadastrovaya-karta (Accessed on 17.7.2019). The rosreestr.net-service provides a service for processing an application for receiving official extracts *from the Unified State Register of Real Estate* (USRRE) and legal verification of real estate. For each property additional information about the cadastral value, cadastral number and other items are available on the web-site via selecting the object and click on details. Extracts from EGRN and other documents and references are also available. To select the substrate of the Google or Yandex map, click on the icon in the right corner and select the option.



Picture 1. Cadastral map of St. Petersburg (Source: Rosreestr).

Via this Rosreestr's service could be checked as a land plot as also apartment before buying/renting. The service for checking the apartment for so called legal purity was created to ensure security in the real estate market. A full check is carried out by the USRRE statements, requesting information about the owner, the databases of the Federal Penitentiary Service, checking the availability of encumbrances, arrest, and finding an apartment as a pledge. This verification procedure is a very important step, since e.g. in 2017 more than 14 000 frauds were registered when buying property (https://rosreestr.net/proverit-kvartiru; Accessed on 17.7.2019).

Each land plot put on cadastral registration in Rosreestr has a unique cadastral number, that can be found in documents on the ground. If you do not know the cadastral number it can be found at the (with the (?) site address, since this information is related (since the cadastral number and side address are conncted (?). Via the service of rosreestr.net a full legal check can be ordered, including information about the owner of the land, the presence of charges, arrest and bail. (https://rosreestr.net/proverit-uchastok; Accessed on 17.7.2019).

INFOBOX 4

Cadastral classifications – construction and building

According to Russian State Register of Real Estate, determination of construction does not include housing buildings.

In the construction industry – (civil engineering works) objects of completed construction, including such facilities as a dam, bridge, road, railway, runway, water supply, heating, power, pipeline, sewerage system, or the result of operations, such as earthworks work, geotechnical processes, but excluding residential buildings and related work on the construction site. https://cadastre.ru/article/7#paragraph_202 (Read: 9.7.2019)

INFOBOX 5

Construction objects of permanent and temporary term of usage – "UPC" as a base

Definitions of construction objects of permanent and temporary term of usage have a legislation base – Urban Planning Code of the Russian Federation dated December 29, 2004 N 190-FZ (as amended on December 27, 2019) (Origin: *"Градостроительный кодекс Российской Федерации" "от 29.12.2004 N 190-ФЗ (ред. от 27.12.2019)"*). Further in the text will be used abbreviation of this *Urban Planning Code – UPC.*

According to Point 10 of Article 1 of the UPC:

"10) an object of capital construction – a building, structure, structure, objects whose construction has not been completed (hereinafter referred to as objects of incomplete construction), with the exception of temporary buildings, kiosks, awnings and other similar structures;"

That is, the main features of the capital construction object will be:

1) a permanent long-term appointment
2) compliance with the requirements of urban standards
3) the need to register real estate in Rosreestr
4) the availability of communications, to ensure the intended purpose;

In more details: https://pravoved.ru/question/183064/ (Accessed on 9.7.2019)

In cases where the lease term exceeds 1 year, the contract is subject to mandatory state registration with the authorities of the Russian Federal Register (Article 26 of the Land Code of RF 2019; Origin: *Земельный кодекс РФ 2019*). Source: http://zemkod.ru/glava-5/st-26-zk-rf ; (Accessed on 12.3.2020)

4. Development of St. Petersburg communal housing properties

Development of St. Petersburg housing properties is a part of a bigger Russian Federal project Creating a comfortable urban environment (Origin: *Федеральный проект «Формирование комфортной городской среды»*). Presentation of the main matter of the project in figure 15 below.

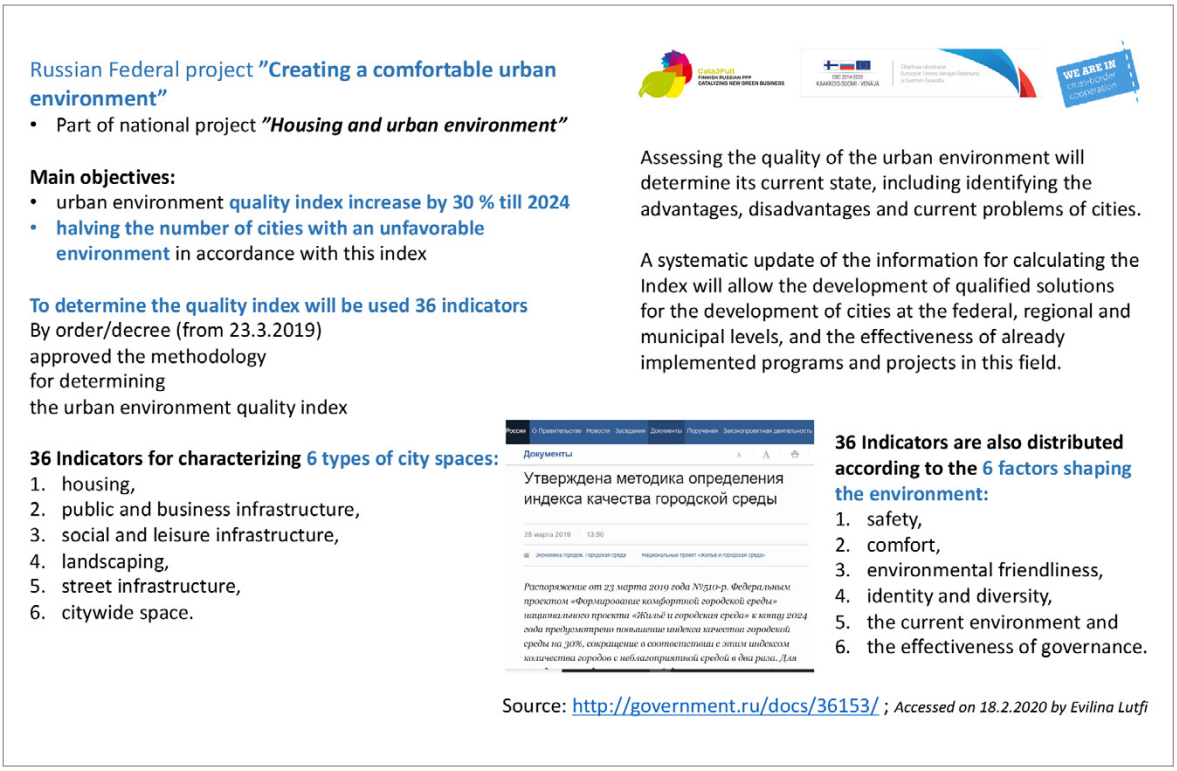


Figure 15. Presentation of the Russian Federal project Creating a comfortable urban environment.

St. Petersburg housing stock consists of 27 696 buildings with total living area of 157,60 millions of square meters. Source: https://www.reformagkh.ru/; (Accessed on 17.3.2020)

The current main two streamlines of dealing with aging block of flats buildings in St. Petersburg are presented in figure 16 below. Activities under those development lines are described in chapters – 4.1 and 4.2. Development in the sphere of tariff regulation is one of the important issues within housing system, so a separate chapter will be dedicated to this – chapter 4.3.

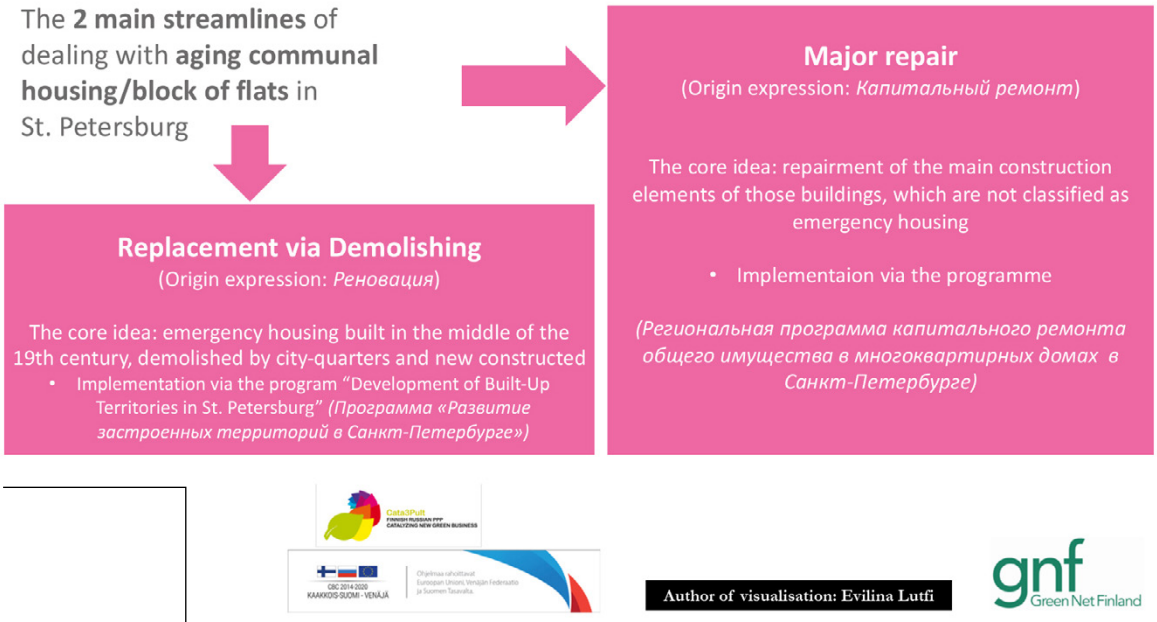


Figure 16. Streamlines of dealing with aging block of flats buildings in St. Petersburg.

4.1 Demolition of urgently built-up housing stock in the mid of the 1950's

The city of St. Petersburg will replace the emergency buildings of the mid-20th century with new and comfortable houses. Old buildings will be demolished,replaced by new ones. Activities are implemented under the program "Development of Built-Up Territories in St. Petersburg" (Origin: *Программа «Развитие застроенных территорий в Санкт-Петербурге*»). The relevant law No. 238-39 on the program was adopted on May 6, 2008 in St. Petersburg. Source: https://rzt.spb.ru/about/obschaya_informaciya/; (Accessed on 16.3.2020)

"SPb Renovation" company was established in 2009 by private investors. The company has signed a contract with the administration of St. Petersburg about developing and constructing of about 900 hectars in St. Petersburg, including construction of new housing, as well as development of physical and social infrastructure. In this large-scale project the *"hrushevkas"* (block of flats buildings constructed in the mid of 1950's) of 22 blocks in 9 districts of St. Petersburg will be demolished and 1 200 of new residential buildings will be built. The volume is equivalent to 10% of the existing housing stock in the city. https://spbren.ru/zastroischik-sankt-peterburga/; (Accessed on 17.3.2020)

4.2 Major repair programme for common areas of block of flats buildings

The major repair programme of common properties of block of flats buildings is a national programme where every region in Russia will develop their own regional programme. In St. Petersburg the programme (origin: *"Региональная программа*

капитального ремонта общего имущества в многоквартирных домах в Санкт-Петербурге") was developed in 2014 and will be running for the next 25 years. Every year the more detailed so-called short-term programmes will be developed. The operator of the implementation of this Regional major repair program for common property in block of flats buildings in St. Petersburg is a Non-profit partnership *"Fund – a regional operator for the major repair program for common property in block of flats buildings in St. Petersburg"* (***SPb Regional Operator of the Fund for the Major Repair;*** Origin: *НО «Фонд – региональный оператор капитального ремонта общего имущества в многоквартирных домах»*) http://fkr-spb.ru/; (Accessed on 17.3.2020)

In 2019, the short-term programme includes 2 656 objects for a total amount of more than 9 billion RUR with the completion of all types of work averages 90%.

What activities are included in the major repair programme?

Altogether 6 groups of activities:

- 3 on main constructive elements of building (roof, walls, basement) and
- 3 on the inside of the building (lift/elevator, basement space and engineering systems inside the building).

There are two main ways to independently obtain reliable information about the dates of repair work for each building:

1. Through the site: https://www.reformagkh.ru/ (Accessed on 16.3.2020).
2. Through the web site of the SPb Regional Operator of the Fund for the Major Repair: http://fkr-spb.ru/program.

Contributions of flat owners to the major repair

This payment is collected for the future repair activities. In 2019, according to the decree of the Government of St. Petersburg, the minimum contribution to major repairs is 4 – 5 RUR/m^2/month (in 2015 was 2 – 3 RUR), depending on the type of block of flats building. The major repair fund does not determine the amount of contributions and does not decide the need to increase them. Instead, this decision is made by the Government of St. Petersburg based on the proposal of the Committee on Housing. The level of contributions is the lowest in Russia.

8 rates of contribution level were developed in St. Petersburg in 2015, depending on the following factors: the period of construction, the façade material and the dating of the repair: before or after the privatization.

The financing of major repair has two mechanisms (Figure 17 below). The majority of the buildings will be repaired with the investment model 2.

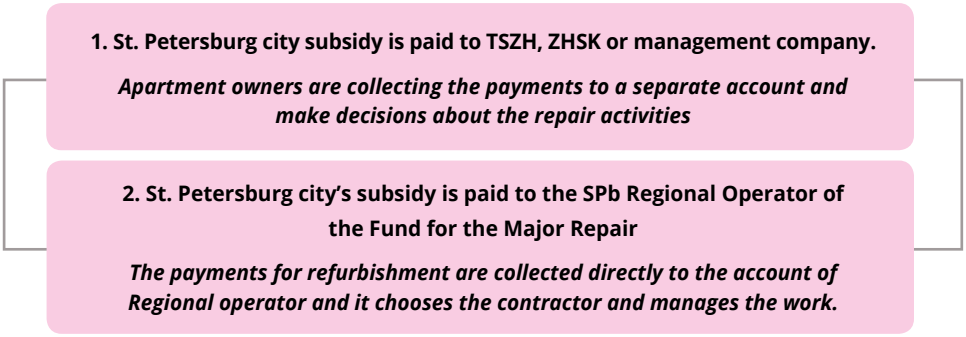


Figure 17. Mechanism of financing of major repair of block of flats buildings in St. Petersburg.

If flat owners would like to implement more activities than included into the programme, the Housing Code allows owners to collect more than the minimum payment. In St. Petersburg in 2015 about 90 buildings were collecting 5–15 RUR/ m^2 per month. Higher level payment should be decided in the General meeting of the flat owners.

INFOBOX 6

Regular maintenance repairs and major repairs of block of flats buildings

The term "major repairs" are expressed in Russia by word "capremont", which comes from expression *"kapitalniy remont"*. A meaning behind this word and the issue widely have been described in the previous Market Watches vol.1 and vol.2. using another term or "capital refurbishment". In this report a new term *'major repairs'* is adopted, which seems to be more accepted in Finnish business society. In this report only updated information is presented since those two market watches were published in June 2018.

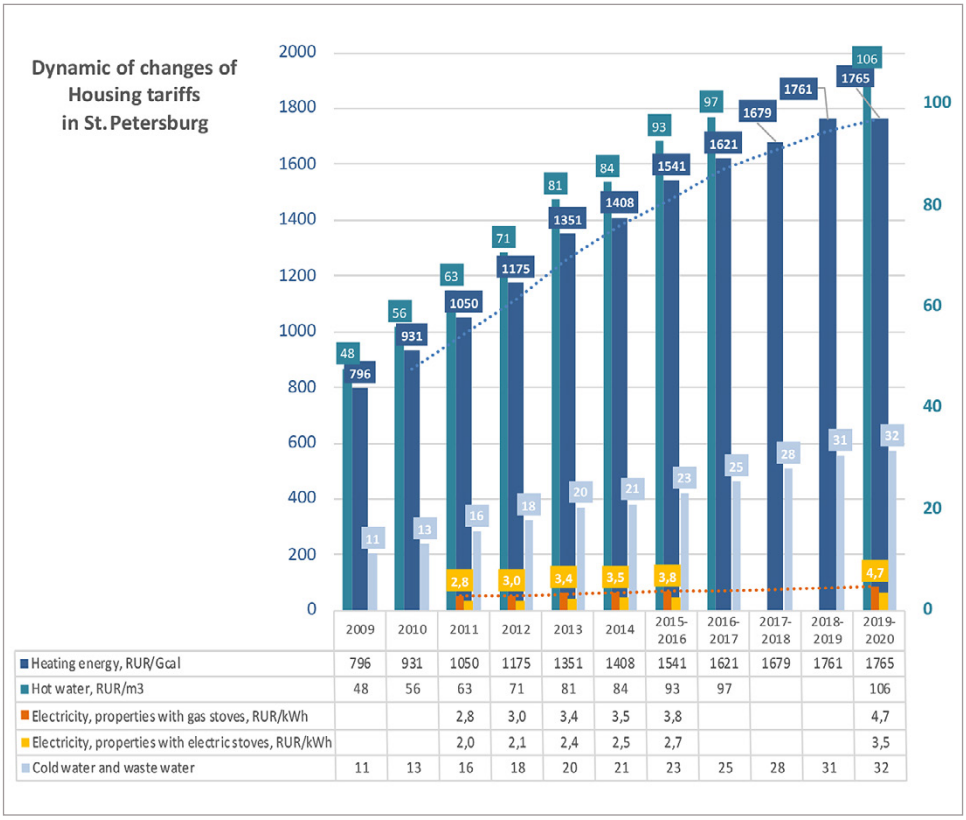
INFOBOX 7

"Passports" of building and land plot

In Russia the term "passport" is used for the technical documentation of the block of flats buildings and for cadastral information of land plots. These passports are obligatory. For example, cadastral passport of land plot is an obligatory attachment for Agreement on Renting of land plot between owner of the land plot and renter. And both passports are needed/obligatory/ demanded for a procedure of privatization of flat.

4.3 Development of housing tariffs in St. Petersburg

By the decision of the Government of St. Petersburg from 1.7.2019, the growth rate of housing utility tariffs was reduced from 4.3% to 0.4%. This is a response to the fast growing tariffs in the last decade. The rates are set for calculating the amount of fees for basic utilities. Dynamic of changes during a last 10 years is presented in the figure 18 below. Sources: http://tarifspb.ru/tariffs/; http://tarifspb.ru/documents/acts/2686/; https://www.gov.spb.ru/helper/sod_fonda/novye-tarify-na-kommunalnye-uslugi/ (Accessed on 18.3.2020).



	2009	2010	2011	2012	2013	2014	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
Heating energy, RUR/Gcal	796	931	1050	1175	1351	1408	1541	1621	1679	1761	1765
Hot water, RUR/m3	48	56	63	71	81	84	93	97			106
Electricity, properties with gas stoves, RUR/kWh			2,8	3,0	3,4	3,5	3,8				4,7
Electricity, properties with electric stoves, RUR/kWh			2,0	2,1	2,4	2,5	2,7				3,5
Cold water and waste water	11	13	16	18	20	21	23	25	28	31	32

Figure 18. Dynamic of changes of housing tariffs in St. Petersburg in 2009–2019.

Data sources:

- **for 2015:** https://www.gov.spb.ru/helper/tarif/tarify-2015-goda/tarify-dlya-rascheta-razmera-platy-za-kommunalnye-uslugi-dlya-naseleni/
- **for 2016:** https://www.gov.spb.ru/helper/tarif/tarify-2016-goda/tarify-dlya-rascheta-razmera-platy-za-kommunalnye-uslugi/
- **for 2017:** https://www.gov.spb.ru/helper/tarif/tarify-2017-goda/tarify-dlya-rascheta-razmera-platy-za-kommunalnye-uslugi-2017/

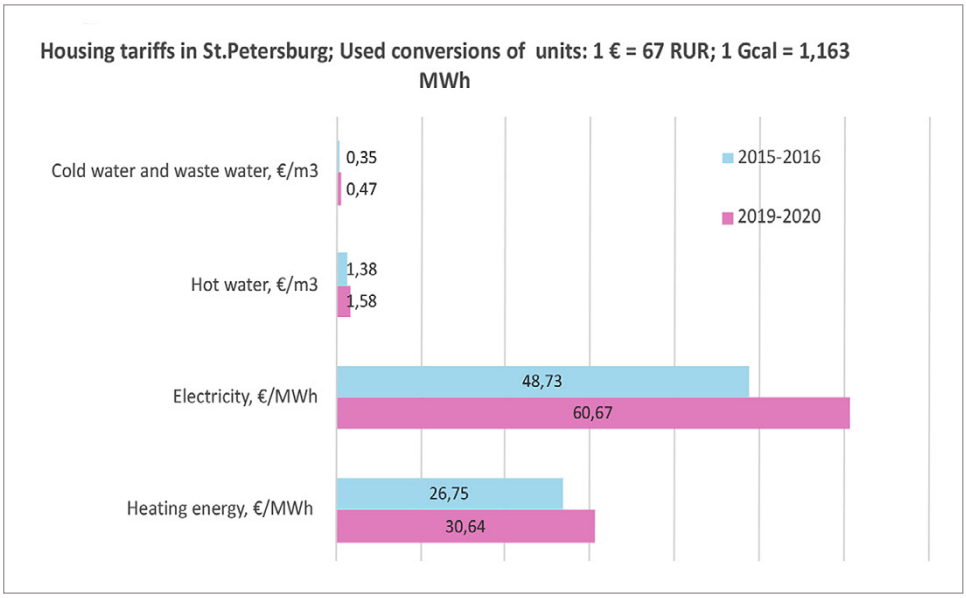


Figure 19. Housing tariffs in St. Petersburg in 2015 and in 2019 – converted to € and MWh.

Life cycle of building

Russian legislation provides the concept of the life cycle of buildings:

"The life cycle of a building or structure is the period during which engineering surveys, design, construction (including conservation), operation (including current repairs), reconstruction, major repairs, demolition of a building or structure are carried out;"

Origin of translation: *Федеральный закон №384-ФЗ от 30.12.2009 "Технический регламент о безопасности зданий и сооружений"... , п.2 ст.2. Редакция от 02.07.2013*

5. Framework of Energy Efficiency improvement in existing housing stock of St. Petersburg

A framework of energy efficiency improvement within communal housing in Russia is shown in the Figure 20 below.

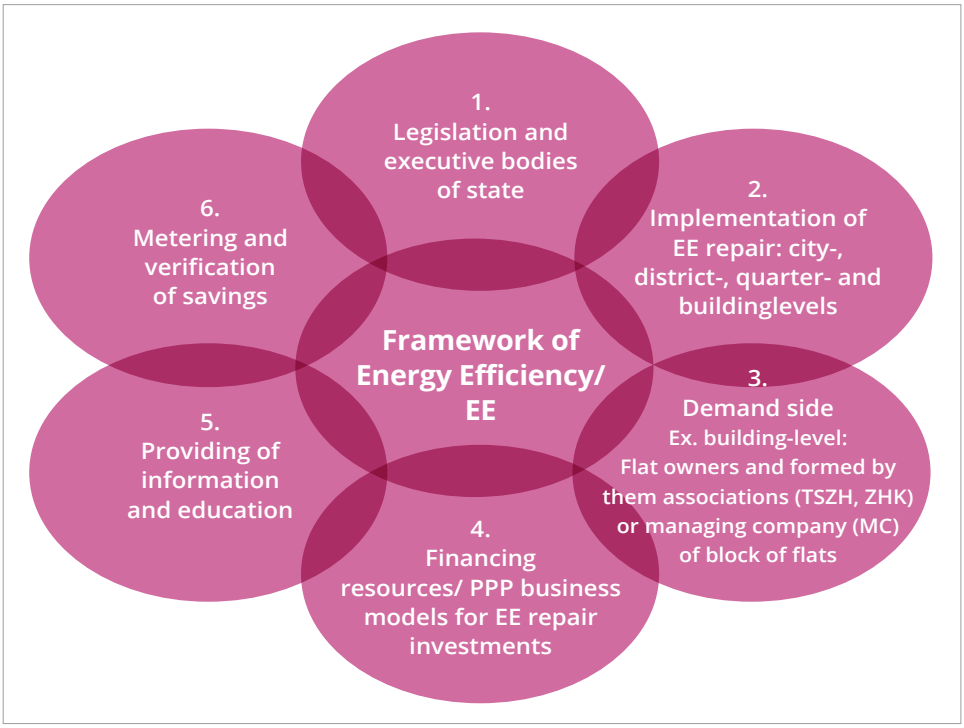


Figure 20. Framework of energy efficiency improvement within communal housing.

The main executive bodies related to energy efficiency improvement in St. Petersburg are:

- Regional executive bodies of the state power of St. Petersburg – Committees and their subordinate institutions such as SUEs, SPIs and SBIs:
  - **Committee on Energy and Engineering and it's 6 subordinates:** TEK SPb (heating), Vodokanal (water and water for district heating system), Pushkin Fuel and Energy Complex (heating for Kolpino, Pushkin and parts of Leningrad oblast), Lensvet (electricity and outdoor lighting), Customer Management (contracts, design, modernisation, etc.) and Energy Saving Center (Regional energy efficiency and saving programme under the Federal Law No. 261-FL of 23.11.2009), technical and methodical support of the Committee, education, publicity, promotion of energy saving and efficiency (in more details in the figure 9, chapter 2.3)
  - **Committee on Housing and SPb regional operator of the fund of major repair programme for common property in block of flats buildings** (in more details about the committee in the chapter 2.3.

- **State Housing Inspectorate of St. Petersburg** with a role of issuing energy efficiency class of block of flats buildings (see description in the chapter 5.1 below)
- **Scientific and Technical Council in the field of housing and communal services of St. Petersburg under the Committee on Housing** with a role of advising to accept/deny new technical proposal (see description in the chapter 5.2 below)
- **Management associations or companies of block of flats buildings** (see description of the role and activities in the chapter 5.3 below)
- **Flat owners**

These will be next discussed in more detail.

5.1 State Housing Inspectorate of St. Petersburg

The State Housing Inspectorate of St. Petersburg (Further – ***HIns***) (Origin: *Государственная жилищная инспекция Санкт-Петербурга*) exercises the authority of St. Petersburg to carry out regional state housing supervision.

As part of its authority, the Inspectorate **carries out licensing of management activities of block of flats building, including licensing control.** https://www.gov.spb.ru/gov/otrasl/inspekcija/ (Accessed on 18.3.2020). in the chapter 5.3.

The Inspectorate is also the authority **issuing Class of Energy Efficiency for block of flats buildings**. The list of documents to be submitted to the Inspectorate in order to issue the Act on the energy efficiency class of a block of flats building. Source: https://www.gov.spb.ru/gov/otrasl/inspekcija/energozberezhenie-i-povyshenie-energoeffektivnosti-v-zhilom-fonde-sank/; (Accessed on 18.3.2020):

1. Application of the managing person
2. The declaration (in any form), in which the following information is mandatory indicated:
   - 2.1 Calendar dates of the beginning and end of the period for which the declaration is submitted;
   - 2.2 The energy efficiency class of the building and the date of its assignment (if the energy efficiency class was previously established);
   - 2.3 Indications of metering devices that take into account the consumption of energy resources consumed when maintaining common property in building at the beginning and end of the reporting period for each type of energy resource and information about metering devices (brand, number, verification time);
   - 2.4 Calculation of the amount of energy resources consumed for each type of energy resource, indicating the units of measurement;

2.5 Calculation of the value of annual specific values of the consumption of energy resources, calculation of bringing the obtained values to the calculated conditions;

2.6 Actual conditions used to bring to settlement – climatic conditions for the period of the declaration submission, average indoor air temperature, population density, quality of utilities;

2.7 Indication of the presence or absence of an individual heat distribution unit with the function of adjustment of the temperature depending on outdoor temperature and energy-efficient (LED) lighting of common areas.

3. Documents confirming that the applicant is the person managing the building (management agreement or minutes of the general meeting of owners of premises, at which the decision was made to manage the building by a homeowners association (a housing cooperative or other specialized consumer cooperative).

4. Document confirming the authority of the applicant's representative, drawn up in accordance with the requirements of the Civil Code of the Russian Federation.

These documents must be certified by the person managing the block of flats building.

Legislative basis: Order of the Ministry of Construction and Housing and Communal Services of the Russian Federation dated 06.06.2016 No. 399 / pr "On approval of the Rules for determining the energy efficiency class of block of flats buildings". (Origin: *Приказ Министерства строительства и жилищно-коммунального хозяйства Российской Федерации от 06.06.2016 № 399/пр «Об утверждении Правил определения класса энергетической эффективности многоквартирных домов»*.)

5.2 Scientific and Technical Council in the field of housing and communal services of St. Petersburg under the Committee on Housing

The Scientific and Technical Council in the field of housing and communal services of St. Petersburg under the Committee on Housing (Original: *Научно-технический совет в сфере жилищно-коммунального хозяйства СПб при Жилищном комитете*) (Further – **STCCH**) was established by the Committee's order on 09.12.2011 № 1000-p. New composition of experts of the STCCH is approved by the order of the chairman of the Committee on 9.1.2020. Source: http://gilkom-complex.ru/media/pages/2020/03/16/9ef69315-9f96-41bb-978d-9054f82803ae.pdf; (Accessed on 18.3.2020)

One of the roles of the STCCH is reviewing of technical proposals and the technologies, materials and equipment proposed to be used in the major repair and maintenance of housing stock of St. Petersburg and supposed to be procured by the Committee on Housing and/or its' subordinate organisations. For the review process the following criteria are valid: (http://gilkom-complex.ru/activities/scientific-technical-council/reglament-rassmotreniya-texnicheskix-predlozhenij-na-nts/):

- An application for review of technical proposals and the technologies, materials and equipment used (hereinafter referred to as the application) may be submitted to the Committee by both a legal entity and an individual (hereinafter referred to as the applicant). The application form is an appendix to the rules.
- At the meeting of the STCCH, technical proposals are reviewed that are ***aimed at solving urgent problems in the field of housing and communal services***. Proposals not containing specific technical solutions are not reviewed.
- **Energy Efficiency and Saving technologies is one of the listed most urgent tasks** (others are: repair of roofing; repair of facades of panel buildings; normalization of the temperature and humidity conditions of attics; extension of the service life of utility networks; waterproofing and strengthening foundations; strengthening of supporting structures; automation of cleaning of house territories from snow and garbage).
- **Criteria for approval** of technical proposals:
  - have the necessary certificates
  - tested (pilot projects completed) at the facilities of the Russian Federation that are at the operational stage and have received positive feedback from organizations that manage such facilities or owners of facilities.
  - Feedback should be submitted as part of the application.
- A response to the inclusion in the work plan of the STCCH of the question of reviewing the applicant's technical proposal indicating the approximate date of the meeting, or a reasoned refusal to review the application, shall be sent by the Housing Committee to the applicant within 30 calendar days from the date of registration of the application with the Committee.
- An application can be submitted by the applicant to the Committee on Housing, both electronically at gk@gov.spb.ru and in hard copy to the postal address: St. Petersburg, 191023, pl. Ostrovsky, d.11 (Origin: *Жилищный комитет, Санкт-Петербург, 191023, пл. Островского, д. 11.)*

Import substitution is one of the group of activities of the STCCH, which makes collegial decisions on possible approval for each fact of inclusion in the developed technical task for the planned purchase of goods, materials, spare parts, etc. imported origin for the needs of the Committee and subordinate to the Committee organizations. Source: http://gilkom-complex.ru/activities/scientific-technical-council/2015-03-06-11-15-51/; (Accessed on 18.3.2020). Actual catalogue of import substitution or accepted by the Committee via STCCH list of Russian domestic solutions/technology could be found: http://gilkom-complex.ru/media/pages/2019/10/15/c59981a9-bed0-4d51-a0bb-bafcac90b1b8.pdf.

5.3 Management associations or companies of block of flats buildings

There are three main types of management organisations of block of flats buildings in Russia and in St. Petersburg. Two of them are non-profit organisations – ***housing association (HA) and housing cooperative (HC)*** – formed by flat owners in those buildings. Abbreviations of non-profit organizations include "ZH". (Origin: *Ж*). Another type of management is by commercial company – ***management company (MC)***. Original names and translations are presented in the Table 3 below.

Generally, **housing sector** in Russia are named ZHKH "ZH" group is cooperative and association mode. Means, that leader (more often – chairman of the council) is one of the inhabitant/owner of apartment. "ZH" – non-profit organization.

The flats owners are responsible for organizing the management of the common property and premises of the building. This regulation came into force about 15 years ago from the Housing Code of Russian federation (Original: *Жилищный Код*). Formally the management is made through so called "self-regulation", which means that a self-regulated organization (SRO) non-commercial partnership (NP) of enterprises of housing sector called "MezhRegionRazvitie" has been established. (Origin: *Саморегулируемая организация Некоммерческое партнерство предприятий жилищного комплекса «МежРегионРазвитие» СРО НП ПЖК «МежРегионРазвитие»*. The main objective of this organization is to develop labor and service market for the management of housing stock. In the cases the owners don't make a decision on choosing the model of management of the building, the regional SRO "MezhRegionRazvitie" choose management company to take care of the building. But in the cases the management company does not work according to the agreement, SRO can only change the management company, but not to give any sanctions to the company which was not implementing the work as agreed.

Mandatory certification of management companies of block of flats buildings in Russia started in 2015 as an attempt to resolve the problem of non-professional management of block of flats buildings. This instrument means that only certified companies can provide management services. Implementation is controlled by the **Housing Inspectorate – Hins (see chapter 5.1)**. If 20% of managed buildings will not be managed according to certificate, then certificate of the management company can be invalidated.

Table 3. Original names and translations of management organisations of block of flats buildings in Russia.

Origin name in Russian and abbreviation	Abbreviation by Latin letters	Translation into Finnish	Translation into English and adopted in Cata3Pult abbreviation
управляющая компания (УК)	UK	hallinnointiyhtiö	management company (MC)
товарищество собственников жилья (ТСЖ)	TSZH	asunto-omistajien yhdistys	housing association (HA)
жилищный кооператив (ЖК)	ZHK	asunto-osuuskunta	housing cooperative (HC)

Table 4. Examples of original names and translations (into Finnish and English) of related to housing sector public authorities of St. Petersburg.

Государственная жилищная инспекция Санкт-Петербурга	Pietarin valtiollinen asumis sektorin tarkastuslaitos	State Housing Inspectorate of St. Petersburg	HIns.*
Жилищный комитет	Asumiskomitea	Committee on Housing	CH*
Жилищно-коммунальное хозяйство (ЖКХ)	Asuinkiinteistö- ja kunnallistekniikkaomaisuus	Housing and municipal infrastructure facilities	Housing sector
Научно-технический совет в сфере жилищно-коммунального хозяйства СПб при Жилищном комитете	Pietarin asumiskomitean alainen tieteellinen ja tekninen neuvosto asumis- ja kunnallis-palvelujen alalla	Scientific and Technical Council in the field of housing and communal services of St. Petersburg under the Committee on Housing	STCCH*

Table 5. Extract from the glossary (Attachment 1) of terms related to repairment activities in housing buildings.

эксплуатация и текущие ремонты	käyttö ja pienet huoltotoimenpiteet ja korjaukset	operation and maintenance
реконструкция	jälleenrakennus	reconstruction
капитальный ремонт	peruskorjaus	major repair

INFOBOX 8

Buildings Energy passport

An energy passport is a document based on the results of an energy survey. Legislative base for building energy passports in Federal Law No. 261-FZ of 23.11.2009 (changes from 27.12.2018; entering into force from 16.01.2019); Origin: *"Об энергосбережении и о повышении энергетической эффективности и о внесении изменений в отдельные законодательные акты Российской Федерации".*

Source: https://legalacts.ru/doc/FZ-ob-jenergosberezhenii-i-o-povyshenii-jenergeticheskoj-jeffektivnosti-i-o-vnesenii-izmenenij-v-otdelnye-zakonodatelnye-akty-Rossijskoj-Federacii/ (Accessed on 15.7.2019)

An energy passport compiled from the results of an energy survey should contain information:

1) on equipping with meters of used energy resources
2) the volume of energy resources used and its change
3) on indicators of energy efficiency
4) the amount of losses of transferred energy resources (for organizations engaged in the transfer of energy resources)
5) on the potential for energy conservation, including the assessment of possible savings in energy resources in kind
6) a list of measures to save energy and increase energy efficiency and their cost estimation.

6. Public Private Partnership business models for real estate market

"Analysis of the main objectives of the socio-economic development strategies of some subjects of the Federation, conducted in [Regional economy ..., 2013], showed their similarity in the fact that they put in first place improving the quality of life of the population based on economic development.
Thus, from the point of view of the state, the high role is obvious.
social component of the socio-economic development of the country and individual subjects of the Federation. However, the provision of a decent social component impossible without the development of production and services, that is, without economic development, which depends largely on the initiative of private business.
The above justifies the need to seek a balance of interests.
government and business for the implementation of socially significant projects.
Option solving the problem of finding such a balance is a public-private partnership (PPP). The development of the PPP mechanism in the region will allow solving primary objectives of socio-economic development, to attract private investment in the region's economy, ensure efficient use property owned by regional authorities, improve the quality of goods and services provided to consumers."
DOI: 10.25702/KSC.2307-5252.2018.9.2.128-141 УДК 332.012:332.025:333.1

А. Н. Чапаргина, А. А. Гасникова, ГОСУДАРСТВЕННО-ЧАСТНОЕ ПАРТНЕРСТВО: ОТ ТЕОРЕТИЧЕСКОЙ ИДЕИ К РАБОТАЮЩЕЙ ПРАКТИКЕ

PPP concept is fixed in the **Federal Law No. 224 – FL "On Public-Private Partnership, Municipal-Private Partnership** in the Russian Federation and Amendments to Certain legislative acts of the Russian Federation", which entered into force on 1 January 2016.

According to the law No. 224-FZ under public-private partnership, municipal-private partnership is understood as "legally fixed for a certain period and based on the pooling of resources risk sharing cooperation of a public partner, on the one hand, and private partner on the other hand which is carried out on the basis of agreements on public-private partnerships, agreements on municipal-private partnerships concluded in accordance with this Federal law to attract private investment in the economy..."

6.1 Energy service agreements (contracts)

Energy service contract (further, ESCO) is special form of a savings agreement operating costs by increasing energy efficiency and introducing technologies providing energy saving. The model has a legislative basis: Federal Law No. 261-FL "On Energy Saving and energy efficiency and on amendments to certain legislative acts of Russian Federation" (Origin: *"№ 261-ФЗ «Об энергосбережении и о повышении энергетической эффективности и о внесении изменений в отдельные законодательные акты Российской Федерации» от 23.11.2009 (ред. от 27.12.2018; с изм. и доп., вступ. в силу с 16.01.2019)"*).

Chapter 5 (Federal Law No.261). Energy service agreements (contracts) and contracts for the sale, supply, transfer of energy resources, which include the terms of energy service agreements (contracts)

- Article 19. **Energy service agreement (contract) (Obs.! Further, ESCO)**
- Article 20. Contracts for the sale, supply, transfer of energy resources, which include the terms of the energy service agreement (contract)
- Article 21. State or municipal energy service agreements (contracts) concluded to meet state or municipal needs energy saving and increasing energy efficiency in the use of energy resources

Energy service agreement (contract) /ESCO (according to Article 19 of Chapter 5 of Federal Law No.261):

1. **Subject of ESCO** is the implementation by the contractor of actions aimed at energy saving and improving/increasing energy efficiency of energy resources consumption by the customer.
2. **ESCO must contain:**
   1) condition on the amount of energy resources savings (including in value terms), which must be provided by the contractor as a result of the execution of the ESCO;
   (as amended by the Federal Law of 10.07.2012 N 109-FZ)
   (see text in previous edition)
   2) condition on the validity period of the ESCO, which must be at least the period necessary to achieve the ESCO-established value of energy savings;
   3) other mandatory ESCO conditions established by the legislation of Russian Federation.
3. **ESCO may contain:**
   1) condition on the obligation of the contractor to ensure, during the execution of ESCO, the regimes agreed upon by the parties, the conditions for the use of energy resources (including temperature, luminous intensity, other characteristics that meet the requirements in the field of labour organization, maintenance of buildings, constructions, structures) and other conditions agreed upon at the conclusion of the ESCO;
   2) condition on the obligation of the contractor to install and commission the metering devices of consumption of energy resources;
   3) condition for determining the price in ESCO on the basis of indicators achieved or planned to be achieved as a result of the implementation of ESCO, including on the basis of the cost of energy resources saved;
   4) other conditions specified by agreement of the parties.
4. **If an ESCO is concluded with a person who is responsible for the maintenance of the apartment/block of flats building** and to whom the owners of the premises in the apartment building have transferred the authority to conclude and execute the ESCO, such person is entitled to assume obligations under the ESCO for the proper execution of which the owners of the premises in the apartment building must perform actions only if written consent is given to each owner of the premises in the apartment building who needs to perform these actions. Otherwise, such an ESCO condition is void.

Distinguishing feature of ESCO is that investor costs reimbursed by the savings achieved, obtained after the introduction of energy-saving technologies. Thus, there is no need for the initial costs of own funds or lending. Investment required for the implementation of the entire project are involved energy service company.

Список изменяющих документов

(в ред. Федеральных законов от 08.05.2010 N 83-ФЗ,
от 27.07.2010 N 191-ФЗ, от 27.07.2010 N 237-ФЗ, от 11.07.2011 N 197-ФЗ,
от 11.07.2011 N 200-ФЗ, от 18.07.2011 N 242-ФЗ, от 03.12.2011 N 383-ФЗ,
от 06.12.2011 N 402-ФЗ, от 07.12.2011 N 417-ФЗ, от 12.12.2011 N 426-ФЗ,
от 25.06.2012 N 93-ФЗ, от 10.07.2012 N 109-ФЗ, от 25.12.2012 N 270-ФЗ,
от 05.04.2013 N 44-ФЗ, от 07.06.2013 N 113-ФЗ, от 02.07.2013 N 185-ФЗ,
от 28.12.2013 N 396-ФЗ, от 28.12.2013 N 399-ФЗ, от 28.12.2013 N 401-ФЗ,
от 04.10.2014 N 291-ФЗ, от 04.11.2014 N 339-ФЗ, от 04.11.2014 N 344-ФЗ,
от 29.12.2014 N 458-ФЗ, от 29.12.2014 N 466-ФЗ, от 29.06.2015 N 176-ФЗ,
от 13.07.2015 N 233-ФЗ, от 03.07.2016 N 269-ФЗ, от 26.07.2017 N 196-ФЗ,
от 29.07.2017 N 217-ФЗ, от 29.07.2017 N 279-ФЗ, от 23.04.2018 N 107-ФЗ,
от 19.07.2018 N 221-ФЗ, от 29.07.2018 N 255-ФЗ, от 03.08.2018 N 340-ФЗ,
от 27.12.2018 N 522-ФЗ, от 26.07.2019 N 241-ФЗ)

http://www.consultant.ru/document/cons_doc_LAW_93978/ce9d0946b609c94f3eb8025cefc3b1c70079f979/ (Accessed on 30.12.2019)

6.2 Concession Agreements

The model has a legislative basis: Federal Law No. 115-FL "On Concession Agreements". (in origin: *Федеральный закон от 21.07.2005 г. № 115-ФЗ "О концессионных соглашениях")*

Список изменяющих документов

(в ред. Федеральных законов от 08.11.2007 N 261-ФЗ,
от 04.12.2007 N 332-ФЗ, от 30.06.2008 N 108-ФЗ, от 17.07.2009 N 145-ФЗ,
от 17.07.2009 N 164-ФЗ, от 02.07.2010 N 152-ФЗ, от 19.07.2011 N 246-ФЗ,
от 28.11.2011 N 337-ФЗ, от 07.12.2011 N 417-ФЗ, от 25.04.2012 N 38-ФЗ,
от 07.05.2013 N 103-ФЗ, от 28.12.2013 N 438-ФЗ, от 28.06.2014 N 180-ФЗ,
от 21.07.2014 N 265-ФЗ (ред. 29.12.2014),
от 03.11.2015 N 307-ФЗ, от 28.11.2015 N 358-ФЗ, от 29.12.2015 N 391-ФЗ,
от 30.12.2015 N 460-ФЗ, от 03.07.2016 N 275-ФЗ, от 18.07.2017 N 177-ФЗ,
от 29.07.2017 N 279-ФЗ, от 31.12.2017 N 503-ФЗ, от 03.04.2018 N 63-ФЗ,
от 29.06.2018 N 173-ФЗ, от 29.07.2018 N 261-ФЗ, от 03.08.2018 N 312-ФЗ,
от 27.12.2018 N 525-ФЗ)

The latest version of this Law: http://kremlin.ru/acts/bank/22649
(Accessed: 11.7 and 30.12.2019).
Source: http://www.consultant.ru/document/cons_doc_LAW_54572/
(Accessed: 30.12.2019)

Chapter 1. General provisions (Articles 1 – 17)

Article 1. Objectives and subject of regulation in this Federal Law
Article 2. Legislations of Russian Federation on concession agreements (CA)
Article 3. Consession agreement (CA)
Article 4. Objects
Article 5. Parties
Article 6. Validity
Article 7. Fee
Article 8. Rights and responsibilities of concessionaire and concessor
Article 9. Rights of concessor on executing controll on implementing of CA
Article 10. Conditions/terms of CA
Article 11. Provision to concessionaire and use by it of a land plot, forest plot, water object, subsoil plot
Article 12. Responsibility of concessionaire on quality of the object of CA
Article 13. Conclusion, amendment and termination of CA
Article 14. Consequences of termination of CA
Article 15. Termination of CA Based on Court Decision
Article 16. Responsibilities of parties CA
Article 17. Settlement of disputes

Chapter 2. Guarantees of rights and legitimate interests of concessionaire (Articles 18 – 20)

Chapter 3. Conclusion procedure of consession agreement (CA) (Articles 21 – 38)

Article 21. Competition for the right to enter into a consession agreement (CA)
Article 22. Consensus Agreement (CA) Decision
Article 23. Competitive Documentation
Article 24. Competition Criteria
Article 25. Competition Commission
Article 26. Announcement of the competition
Article 27. Submission of applications for participation in the tender
Article 28. Opening of envelopes with applications for participation in the tender
Article 29. Preliminary selection of bidders
Article 30. Submission of Bids
Article 31. Opening of envelopes with competitive bids
Article 32. Procedure for consideration and evaluation of competitive bids
Article 33. Procedure for determining the winner of the competition
Article 34. The content of the protocol on the results of the tender and the period for its signing
Article 35. Publication and posting of the results of the competition, notification of the participants of the competition about the results of the competition
Article 36. CA
Article 37. Conclusion of CA without a tender
Article 38. Repealed

Chapter 4. Features of the regulation of relations arising in connection with the preparation, conclusion, execution, amendment and termination of concession agreements in relation to heat supply facilities, centralized hot water supply systems, cold water supply and (or) water disposal, individual objects of such systems (Articles 39 – 53)

Article 39. Concession agreement in respect of such objects
Article 40. Parties
Article 41. Fee
Article 42. Terms
Article 43. Features of the change
Article 44. Guarantees of concessionaire rights
Article 45. Decision to conclude
Article 46. Features of the tender documentation required for the tender for the right to conclude a concession agreement (CA)
Article 47. Competition eligibility criteria for a concession agreement (CA)
Article 48. Features of submitting applications for participation in the competition for the right to conclude
Article 49. Features of the submission, consideration and evaluation of competitive bids
Article 50. Features of a joint tender for the right to conclude a concession agreement (CA)
Article 51. Features of CA Conclusion
Article 52. CA Conclusion Initiated by a Potential Investor
Article 52.1. Features of the conclusion of CA in the price zones of heat supply
Article 53. Peculiarities of the state registration of property rights for real estate objects being created and for objects of incomplete construction provided for by the concession agreement regulated by this chapter

Chapter 4.1. Features of the regulation of relations arising in connection with the preparation, conclusion, execution and termination of a concession agreement (CA), the object of which are information technology objects or information technology objects and technical means to ensure the functioning of information technology objects

Article 53.1. Concession agreement, the object of which are such objects

Article 53.2. Features of the preparation, conclusion, execution and termination

Chapter 5. Final provisions (Article 54)

The latest amendments for Article 4. Objects of the concession agreement of the No.115-FL are coming from 2 other FL:s – No. 173 and No.275. Amendments are added 6 new objects 17) – 22) as described below.

Added objects 21) and 22) from No. 173-FL on 29.6.2018:

"21) computer programs, databases, information systems (including GIS) and (or) sites in the information and telecommunication network "Internet" or other information and telecommunication networks, which include such computer programs and (or) databases data, or a set of these objects (hereinafter – information technology objects), or information technology objects and property technologically associated with one or more of these objects and intended to ensure their operation or the implementation of another yours elf, provided for by concession agreement (hereinafter - the technical means to ensure the functioning of information technology facilities)".

"22) a set of buildings, parts of buildings or premises, united by a single purpose with movable property, technologically associated with information technology objects, and intended for automation using computer programs and databases of the processes of formation, storage, processing, reception, transmission, delivery of information, providing access to it, its presentation and distribution (data processing centers)".

Added points 17) – 20) from No.275-FL on 3.7.2016, entered into force on 1.1.2017:

17) facilities for processing, accumulation, utilization, neutralization, disposal of municipal solid waste;

18) public utility infrastructure objects or public utility facilities not specified in clauses 10, 11 and 17 of this part, including power supply facilities, facilities intended for illuminating the territories of urban and rural settlements, facilities intended for land improvement;

19) objects of social services for citizens;

20) gas supply facilities;

Source for compiled list above: http://base.garant.ru/12141176/1b93c134b90c6071b4dc3f495464b753/#block_4111 (Accessed: 11.7.2019)

Parties of the concession agreement

Concessionaire – an individual entrepreneur, a Russian or foreign legal entity, or two or more specified legal entities acting without forming a legal entity under a simple partnership agreement (joint activity agreement).

Concessionary in the case of **objects 1, 11 and 17 – 20** of Article 4 of this Federal Law:

1. Belonging to a SUE / MUE on the right of **economic management**, such an enterprise **participates** on the side of **the concessionaire** and exercises certain powers along with other parties who can carry them out in accordance with No.115 -FL.

2. Belonging at the time of the decision to conclude a concession agreement to a SUE/MUE on the right of **operational management**, such an enterprise **may participate** on the side of the concessionaire and exercise certain powers along with other parties who can carry them out in accordance with No.115 -FL, **but fulfilling condition, that as a result of the transfer of the property by concession agreement, it will not lose the ability to carry out activities, goals, subjects defined by its charter.**

The No.115-FL gives the rights and guarantees of concessionaires in PPP projects, providing for the possibility of the grantor's fees, as well as holding joint competitions in various public-law entities, entered into force. A "private initiative" mechanism for entering into concession agreements is in Russian law enforcement practice.

United website information system of PPP in the Russian Federation (www.pppi.ru) presents information on the legal basis in this area, on projects in the context of regions and industries, presented analytical materials. Links to resources on PPP on the Internet are given.

In order to consolidate the efforts of market participants aimed at development of public infrastructure using PPP mechanisms was Association "Center for the Development of Public-Private Partnership" was created (www.pppcenter.ru).

Levels of PPP in Russian Federation:

- **Municipal**
- **Municipal with regional participation**
- **Regional**

Areas of Public Private Partnership/PPP- projects in Russian Federation:

- **Energy**
- **Transport**
- **Housing**
- **Social**

6.3 Leasing agreements

Comparing to Concession and ESCO Agreements, Leasing agreement in Russia are seeing more "light" type of agreement in the context of improvement of energy efficiency. Leasing agreements in Russian Federation at this moment are mostly used in industrial sector. Not observed implemented cases within housing or public sectors. So, not much attention to those in this watch.

6.4 Simple partnership agreements

The essence and significance of a simple partnership agreement (agreement on joint activity) is an agreement of two or more persons (partners) on combining their contributions and joint activities without forming a legal entity for profit or other purposes that do not contradict the law.

The legal base of the simple partnership agreement is Civil Code of the Russian Federation (Civil Code) (Origin: *Гражданский Кодекс РФ (ГК РФ)*) »PART TWO» SECTION 4 »Chapter 55 Article 1041. Partnership Agreement. Source: http://www.gk-rf.ru/statia1041 (Accessed on 12.3.2020)

A simple partnership agreement should be separated from legal entities – commercial organizations acting in relations in the form of a full partnership or a limited partnership (Articles 69–86 of the Civil Code of the Russian Federation). A simple partnership agreement does not create a legal entity, but aims at a different, common economic goal for all partners.

If in traditional mutually binding agreements (sale and purchase, storage, lease, etc.) the rights and obligations of the parties are of a counter nature and correspond with each other, then within the simple partnership agreement partners combine property and actions to achieve a common goal for all participants (for example, construction). The presence of a common economic goal determines the specifics, as well as the continuing nature of the simple partnership agreement. The term "comrade" in the treaty in question, in contrast to the everyday used, has a special, legal meaning.

7. Legislation of Russian Federation

Laws, codes and regulations are the basis of legislation of Russian Federation. In addition to those, legislation also includes all information that is related to law (legal information): materials for the preparation of draft laws and other regulatory legal acts, their discussion and adoption, accounting and streamlining, interpretation and implementation of legal norms, law enforcement practice materials, materials on legal education and development legal scientific concepts. With this in mind, the system of legislation can be defined as an array of legal acts and closely related regulatory, technical, scientific reference legal materials covering all areas of legal activity. https://legalacts.ru/Informacija/; (Accessed on 15.7.2019).

A characteristic feature of the system of legal acts is its hierarchical structure, in accordance with which each act occupies its own step on the hierarchical ladder, in subordination to other acts, that is, the ratio of acts is characterized by the supremacy of some acts over others (see Figure 21 below).

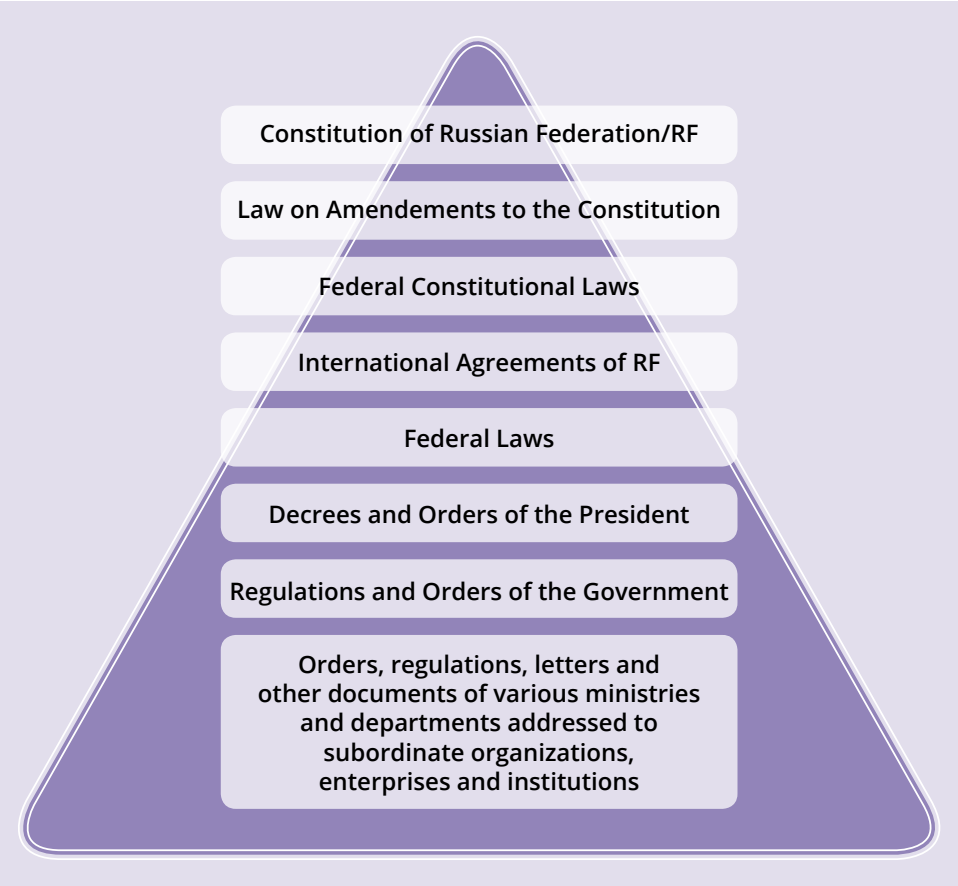


Figure 21. Hierarchical structure of the system of legal acts of Russian Federation. https://edu-russian.ru/ierarkhiya-rossijskikh-normativno-pravovykh-aktov.html; (Accessed on 15.7.2019)

In accordance with legal force, regulatory legal acts are divided into:

- federal constitutional laws

  Are a kind of federal laws of the RF, is published on issues that are in the sphere of the regulation of the Constitution

- federal laws

  Legislative acts of the federal level of the RF, adopted based on and in accordance with the Constitution of the RF

- codes https://legalacts.ru/kodeksy/

- bylaws

  Bylaws are means of implementing legislation. The acts of the highest level in the hierarchy of bylaws are acts of the President of the RF, taken in the form of decrees and orders.

  The next in importance from the hierarchy of bylaws are acts of the Government of the RF, which are adopted in the form of decrees and orders and have greater legal force in relation to acts of federal executive bodies and acts of local bodies.

  Regulations in the RF are secondary legislation issued on the basis of and pursuant to laws. They may specify the norms of the laws, interpret them or establish new norms, but they must comply with and not contradict the laws.

- international agreements

  A legal act regulating relations between the RF and a foreign state or international organization

- domestic agreements

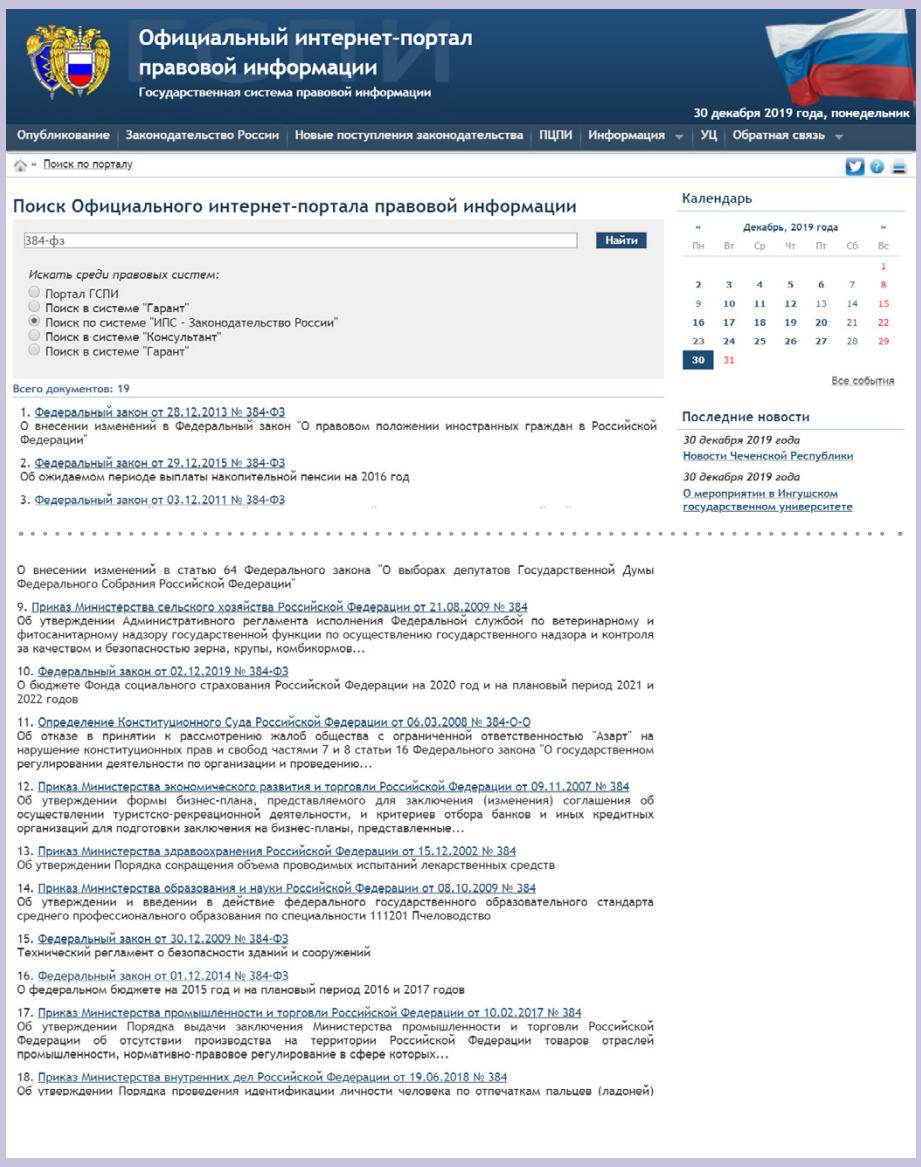
  A regulatory legal acts regulating relations between the RF and constituent entities of the Russian Federation, as well as between various constituent entities of the RF on various matters referred by the Constitution to the jurisdiction of constituent entities of the RF.

INFOBOX 9

Structure of the names and contents of Federal Laws of Russian Federation

General comment on understanding of legislation structure: it is recommended to deal with hall name of legislative component, including the name and the date. For example, search of "384-фз" on the official internet portal of legislative information of Russian Federation (www.pravo.gov.ru; accessed on 30.12.2019) gives 19 documents as result. Below is example of two Federal Laws (in origin *"Федеральный закон" with abbreviation "ФЗ"*) from the list with the only difference – the date of adoption:

- *15. Федеральный закон от 30.12.2009 № 384-ФЗ*
- *Технический регламент о безопасности зданий и сооружений*
- *16. Федеральный закон от 01.12.2014 № 384-ФЗ*
- *О федеральном бюджете на 2015 год и на плановый период 2016 и 2017 годов*



Changes in legislation sphere could be followed also via the official web-site of Ministry of Construction and Housing of RF (Minstroy RF) http://www.minstroyrf.ru/docs/1241/ (Accessed on 12.7.2019).

As an example, will take the same mentioned above the Federal Law No. 384-FZ of December 30, 2009 "Technical Regulations on the Safety of Buildings and Constructions" (in origin *"Федеральный закон №384-ФЗ от 30.12.2009 «Технический регламент о безопасности зданий и сооружений»*). Редакция от 02.07.2013."

This No.384-FL with amendments from 02.07.2013 has 7 Chapters and 44 Articles. The structure is presented in smart art object below. Source: http://pravo.gov.ru/proxy/ips/?docbody=&nd=102135277&intelsearch=384-%F4%E7; (Accessed on 30.12.2019)

The 7 chapters of this law:

1. general provisions of the legislative act;
2. standards and requirements for preventing the danger of construction sites;
3. requirements for the results of technical studies, design papers;
4. security guarantees during the construction, reconstruction, operation and deep refurbishment;
5. safety guarantees during the development of the structure, termination of its use and demolition;
6. conformity assessment, installation processes, adjustments and related operations;
7. final provisions.

The 7 chapters and how 44 articles are structured within those chapters:

Chapter 1: General provisions (Articles 1 – 6)

Article 1: Purposes of the adoption
Article 2: Basic Terms
Article 3: The scope of application
Article 4: Identification of buildings and structures
Article 5: Ensuring compliance with the safety
Article 6: Documents in the field of standartization

Chapter 2: General safety requirements (Articles 7 – 14)

Article 7: ... for Mechanical safety
Article 8: ... for Fire safety
Article 9: In case of dangerous natural processes and phenomena and (or) technogenic influences
Article 10: For human health living and staying conditions
Article 11: For users
Article 12: Accessibility for persons with disabilities and other groups with limited mobility
Article 13: Energy Efficiency ... so that in the operation period an efficient use of energy resources is ensured and the wasteful use of such resources is excluded
Article 14: For a safe level of impact on the environment in the process of construction and operation

Chapter 3: Requirements for engineering surveys and design documentation to ensure safety of buildings and structures (Articles 15 – 33)

Article 15: General requirements for ....

Article 16: ... for Ensuring Mechanical Safety of buildings or structures
... for Fire... in case dangerous natural processes...
(Obs.! Order: Mechanical ▸ Fire ▸ Dangerous natural...
the same as in chapter 2)

Article 19: ... for Enforcement of sanitary and epidemiological requirements

Article 20: ... for Ensuring air quality

Article 21: ... for ensuring water quality used as drinking and for household needs

Article 22: ... to insolation and sun protection

Article 23: ... to lighting

Article 24: ... to noise protection

Article 25: ... to moisture protection

Article 29: ... to micro-climate of indoor environment

Article 31: ... for Provision of energy effectiveness of buildings and structures

Chapter 4: Ensuring the safety in the process of construction, reconstruction, deep and current refurbishment (Articles 34 – 35)

Article 34: Requirments for for building materials and products, used in the construction process

Chapter 5: Ensuring the safety during operation, upon termination of operation and in the process of demolition (Articles 36 – 37)

Chapter 6: Conformity assessment of buildings and structures, as well as associated with buildings and structures processes (surveys, design, construction, installation, commissioning, operation and demolition) (Articles 38 – 41)

Chapter 7: Final Provisions (Articles 42 – 44)

Generally, in the structures of Federal Laws are existing 3 similarities:

1. **Chapter 1/General provisions' the last articles** are dedicated to **ensuring compliance** and **standardization documents**. In our example from *No.384-FL*:

Article 5. **Ensuring compliance with the safety ... of the requirements of this Federal Law**

Article 6. **Documents in the field of standardization**, as a result of the application which ensures **compliance with the requirements of this Federal Law**

2. **Chapter before Final provisions**, is dedicated to so called **conformity assessment and have 4 articles**. In our example from No.384-FL the Chapter 6:

Article 38. General provisions *of conformity assessment*

Article 39. Rules for mandatory *conformity assessment* ... shall be carried out in the form of: 1) ... - 7) ... carried out by the body ...

Article 40. Rules for mandatory assessment of compliance ... with the requirements of this Federal Law and with the requirements established in the design documentation, is carried out in the form of: ... 1) operational control; 2) state control (supervision). ...

Article 41. Rules for voluntary *conformity assessment* ... shall be carried out in the form ... and in other forms provided for by the legislation of the Russian Federation.

3. **Final provisions chapters** are dedicated to **requirements, amending and entering into force. In our example from No.384-FL:**

Chapter 7: Final Provisions (Articles 42 – 44)

Article 42. Requirements ... do not apply until reconstruction or deep refurbishment ... to the following ...

1) ... put into operation before the entry into force of such requirements;

2) ... the construction, reconstruction and deep refurbishment of which is carried out in accordance with the design documentation approved or sent for state examination prior to the entry into force of such requirements;

3) ... whose project documentation is not subject to state examination and the application for the issuance of a building permit which has been submitted before the entry into force of such requirements. ... building codes and rules approved before the date of entry into force of this Federal Law are recognized by the codes of rules ...

Article 43. On amending ... Chapter 1 of the Federal Law of December 27, 2002 N 184-ФЗ "On Technical Regulation" ...

Article 44. Entry into Force of this Federal Law

7.1 Federal Laws related to energy efficiency of buildings

The two main Federal Laws of Russian Federation are related energy efficiency:

- Federal Law No. 261-FZ of 23.11.2009 (changes from 27.12.2018; entering into force from 16.01.2019) “Об энергосбережении и о повышении энергетической эффективности и о внесении изменений в отдельные законодательные акты Российской Федерации”.

- Federal Law No. 384-FZ of 30.12.2009 (changes and amendments from 02.07.2013) “Technical Regulations on the Safety of Buildings and Constructions.” Full document available on the official web-site of Ministry of Construction and Housing of RF (Minstroy RF) http://www.minstroyrf.ru/docs/1241/ (Accessed on 12.7.2019).

7.2 Waste management – legislation context

- 4 Enterprise categories in environmental legislation (see Table 6).
- 3 different types of Requirements for each environmental report: Permit, Declaration, Report
- 5 types of wates by origin: animal, vegetable, mineral, chemical, community waste
- 3 modes of matter of waste: gas, liquid, solid
- Physical form (eg blocks, shavings, fuel liquids)
- Formation of raw materials, chemical composition, production technology

Table 6. Enterprises categories within environmental legislation of Russian Federation.

Enterprises categories within environmental legislation		Permission	Declaration= emissions de facto	Report	
		1	2	3	4
Order: 1. Emission Inventory -> 2. Normative ->		3. Permission / Declaration / Report (depending on enterprise category)			
air	"vybros" **ПДВ**				
water	"sbros" **ПДС**				
soil	"othody" **НООЛР**				

Important notice based on understandings from the event in November 2019 in St. Petersburg Chamber of Commerce: "Subject" of waste generation and payment. Common Error: Differences in Form! The company is registered in St. Petersburg but pays waste tax in the Leningrad Oblast. 50% of companies registered in St. Petersburg "have not paid the waste disposal fee" in 2018 because they have entered incorrect information in the form!

St. Petersburg "Vodokanal" / Water Supply Agency: Important Legislation: 416-Federal Law (7/12/2011; 30.3, 1 Court); Statement 644 (7/29/2013, 34 – Obligation); rules 525 (6-9, 20, 30); 644, 114 – Approval of the plan for investments that reduce water emissions (max. 50% of environmental charges on natural water pollution can be reduced if investments are made to reduce emissions).

7.3 Federal Waste Classification Catalog – "FKKO"

The Federal Waste Classification Catalog (origin *Федеральный классификационный каталог отходов, Приказ Росприроднадзора от 22.05.2017 №242, с изменениями от 2 ноября 2018 года № 451*) is a list of wastes containing classified and structured information by type of name and definition of hazard class for any type of garbage. Official abbreviation used for this catalog is ФККО. Taking into use Latin **analog – FKKO**.

FKKO was primarily created to to ensure the safety of waste disposal and waste transportation; in conditions that do not violate environmental principles of preserving the purity of nature.

In the FKKO different types of wastes are organised in blocks and have logical hierarchy. As an example, the section of mining wastes is presented in Infobox 10. Search by name or code is possible. Search: found 8500 options: http://kod-fkko.ru/?s= (Accessed on 11.3.2020).

Wastes – substances of different origin formed in production or as a by-product of other human activities – are divided in the FKKO into 3 main categories:

- goods or products that have lost their functionality
- goods or products that became into non-pleasant/unusable condition
- packaging materials

INFOBOX 10

The classification of waste by different factors

- origin of waste – 5 types:
  - animal, vegetable, mineral, chemical, municipal
- the state of aggregation of the substance, as well as the physical form
  - blocks, shavings, fuel fluids
- Raw materials formation, chemical composition, production technologies
- the last number indicate environmental hazard.

Hierarchy of FKKO. Wastes from mining as example.

8. Study cases for business development

8.1 137 type blocks of flats or 17% of St. Petersburg community housing stock

The buildings of 137 type are representing about 17% of the existing St. Petersburg community housing stock.

Characteristics of the type 137:

- Facade – panel
- Number of floors – 9, 12, 16, 17
- The height of the premises is 250 cm
- Apartments – 1,2,3 room
- Manufacturer – DSK-7 (DSK Block)
- Years of construction – 1974–1992
- Distribution Cities – St. Petersburg, North West Russia Region, other regions of RF
- Developer: LenNIIproject

It is useful to keep in mind, that the type is the same, but buildings are different. This type has many different modifications depending on the year of construction. In figure 22 are presented some descriptions. In more details original information is available on open access Yandex disk, which author is **domavspb** A name of the set of information is notes and articles from various magazines about Leningrad, houses, series and standard projects, built and not implemented, building technologies (Original: *Заметки и статьи из различных журналов про Ленинград, дома, серии и типовые проекты, построенные и не реализованные, строительные технологии.)* Link to the Yandex disk: https://yadi.sk/a/i6_pi16w3VkprN (Accessed on 20.5.2020)

Figure 22. Descriptions of different modifications of type 137 block of flats buildings of St. Petersburg.

The construction of the “classic version” of the type 137 began in 1973, but it did not reach the active stage until the 1980s.

These type of buildings are selected as a study case for the Cata3Pult not only based on the scaling potential, but also on the fact that these type of buildings are appreciated and are not on the list of “potential demolitions”. The first series of energy efficiency measures have already been implemented in a block of flats of the same type. It has been done only in small scale, but some ideas of how to approach this task can be extracted from this experience. Existing understanding of resources consumption (incl. energy and water) and technical characteristics of buildings.

Picture 2. Photo of the building of 137.11.2 modification in St. Petersburg. Source: http://domavspb.narod.ru/. Author: unknown.

As a study case for the Cata3Pult is selected well-developed modification of the type 137 block of flats – 137.11.2. This modification has the following **configurations**:

- 12 floors, 2 staircases and 118 apartments;
- 12 floors, 2 staircases and 214 apartments;
- 12 floors, 3 staircases and 177 apartments;
- 12 floors, 3 staircases and 321 apartments;
- 12 floors, 4 staircases and 236 apartments;
- 12 floors, 5 staircases and 295 apartments;
- 16 floors, 2 staircases and 158 apartments;
- 16 floors, 3 staircases and 237 apartments;
- 16 floors, 6 staircases and 474 apartments;
- Non-serial configurations

The most expensive apartments on the real estate market of the type 137 in St. Petersburg are in the modification is 137.11.2 and its houses, which were built about between 1986 and 1989. As example of such building see picture 2. Selected study cases of the Cata3Pult are representing exactly such kind of modifications. Configurations of those are marked by light blue colour in the list above. In more details information is Table 8 – Basic information or content of Building Passport of two block of flats 137.11.2 of the study cases.

Houses built before 1992 by the industrial method of structural elements produced at DSK-2. The first buildings of the 137.11 modification have many shortcomings, the major one being the poor waterproofing of panel joints and cold exterior walls. However, over the years of mass production, the technology was nevertheless finalized, and the buildings of the heyday of DSK-2 (1986–1989) were of the highest quality.

These houses have two elevators and the kitchen area is more than 10 m^2. The apartments have parquet floors and a room height of 2.7 m. “Improved floor plans for houses” (Origin: *дома улучшенной планировки*). Houses built after 1992 have been subject to many uncertainties, as the construction has been carried out by private companies following the bankruptcy of a state-owned building company. There are cases when the last floors of the prefab house are built of brick, etc.

For more information on technical solutions, a series of houses located in different city parts, repair methods, recommendations, and other information can be found in the Russian-document “in St. Petersburg prefabricated houses – the technical characteristics, project solutions and repair procedures” («Панельные здания Петербурга – технические характеристики, проектные решения, методы ремонта»). Series 137 data starting on page 55.

Case study block of flats of 137 type in the Cata3Pult project is located in the Kolpino district of St. Petersburg. To the east is the city of Pushkin and to the west the Leningradskaya oblast. The building is located in the so-called “energy-efficient quarter” area dedicated to the development within St. Petersburg.

This umbrella project is led by the St. Petersburg Homeowners Association (Origin: *Некоммерческое партнерство «Городское объединение домовладельцев»*) – one of the partners of the Cata3Pult project. In Figure 23 below is presented location information of the study case block of flats.

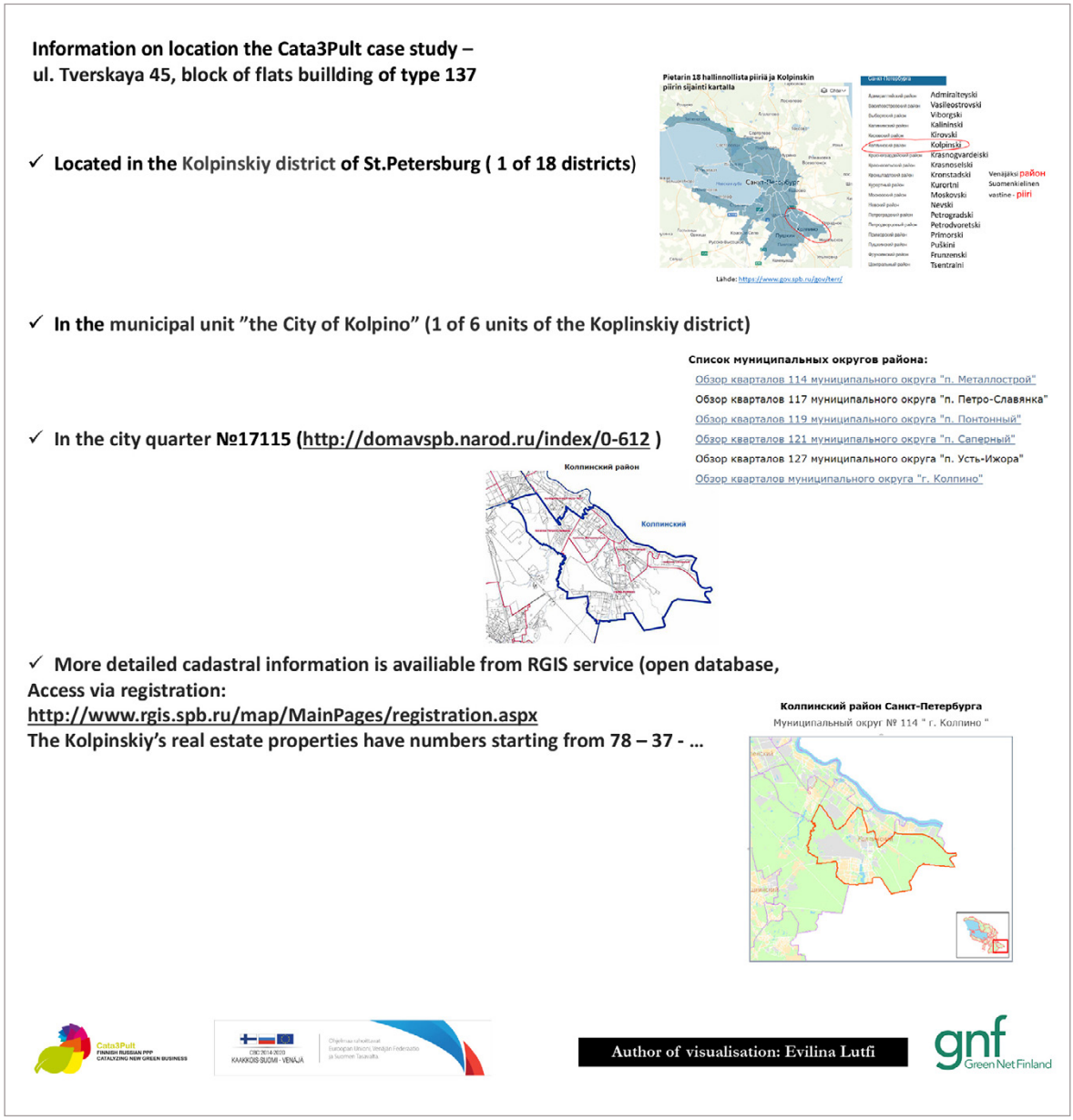


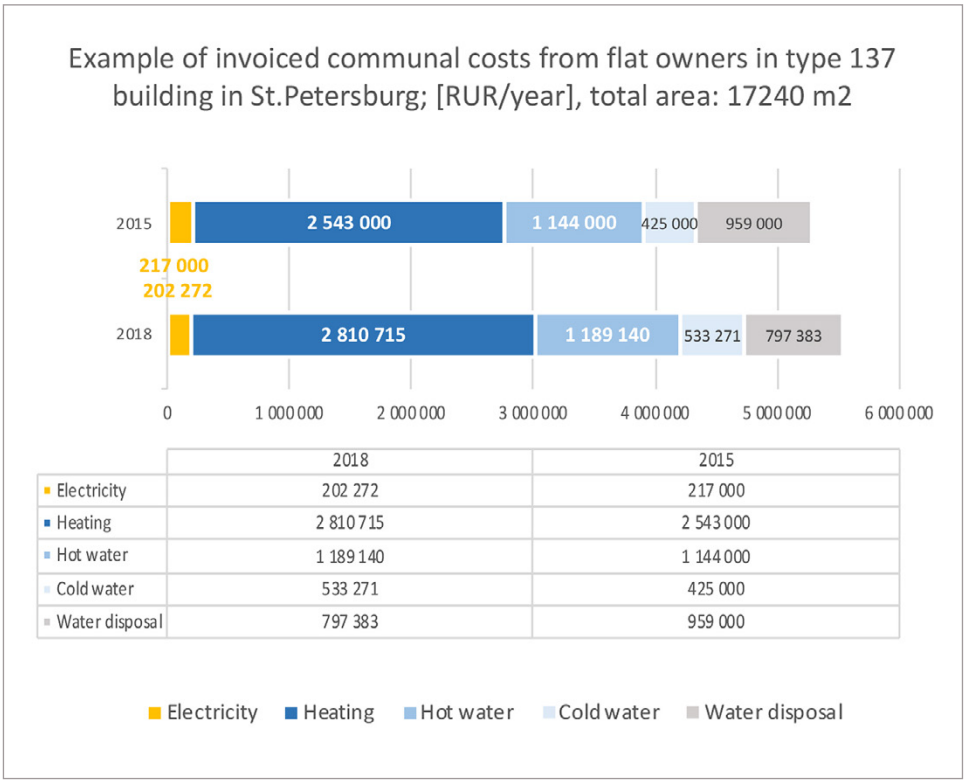
Figure 23. Information on location of the Cata3Pult case study block of flats.

Rates on quality of management companies of block of flats (***MCBF***) could be checked via web-service delivered by Committee on Housing: http://gilkom-complex.ru/activities/upravlenie_mkd/; (Accessed on 18.3.2020). In the table below are presented MCBF operating in Kolpinskiy district of St. Petersburg as example.

Table 7. Management companies of block of flats of Kolpinkiy district of St. Petersburg and their operation volumes.

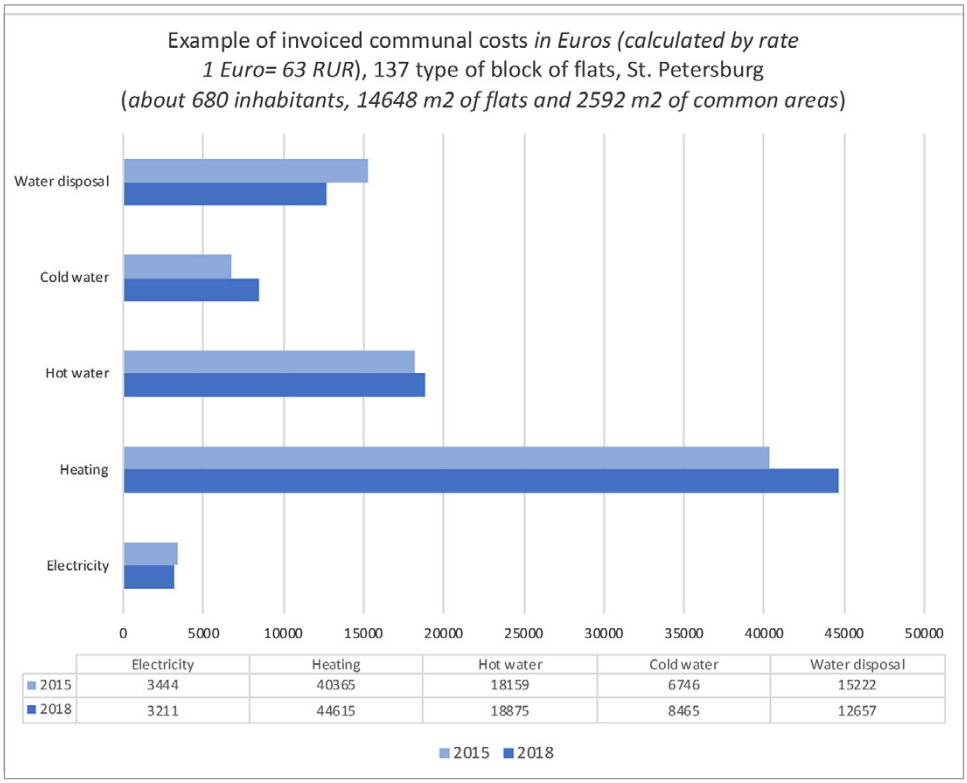
Name of managing organization	The names of the districts of St. Petersburg in the territory of which the managing organization carries out activities for the management of block of flats buildings	The number of buildings managed by the organization for the St. Petersburg Licensing Register	The area of buildings managed by the organization according to the site http://www.reformagkh.ru (thousand square meters)
ЗАО "Северная корона-Холдинг"	Kolpinskiy	6	37,06
ООО "Гарант-Сервис"	Kolpinskiy	119	449,22
ООО "ГК Д.О.М. Колпино"	Kolpinskiy	36	164,48
ООО "ГК Д.О.М. Центр"	Kolpinskiy	1	3,58
ООО "ЖКС № 2 Колпинского района"	Kolpinskiy	70	422,21
ООО "Рыбацкое Стройсервис"	Kolpinskiy	31	287,15
ООО "Управляющая компания "Ижорский Дом"	Kolpinskiy	6	82,04
ООО"УК "ЖИВИ - ЮГ"	Kolpinskiy	4	58,74
ООО "Монтаж Оборудование Плюс"	KolpinskiyКрасногвардейский; Невский;	3	89,37
ООО "Самолет УК"	KolpinskiyКрасногвардейский; Невский;Фрунзенский;	16	283,89
ООО "ЕВРОДОМ"	KolpinskiyКрасносельский;	36	140,55
ООО "УК Жилой квартал"	KolpinskiyМосковский;	9	41,75
ООО "ЖКС № 1 Колпинского района"	KolpinskiyПушкинский;	393	1 632,60

Resources consumptions based on invoicing for ***communal services*** (origin: *коммунальные услуги*). In Figures 24 – 26 are presented such costs in the study case block of flats. In Figure 27 below is presented a sectional view of the building 137.11.2 and floor plans of the apartments on the floor.



	2018	2015
Electricity	202 272	217 000
Heating	2 810 715	2 543 000
Hot water	1 189 140	1 144 000
Cold water	533 271	425 000
Water disposal	797 383	959 000

Figure 24. Invoiced communal costs in RUR in the study case. Source of information for calculations: https://www.reformagkh.ru/myhouse/profile/view/8606450; (Accessed on 10.3.2020)



	Electricity	Heating	Hot water	Cold water	Water disposal
2015	3444	40365	18159	6746	15222
2018	3211	44615	18875	8465	12657

Figure 25. Invoiced communal costs in EUR in the study case.

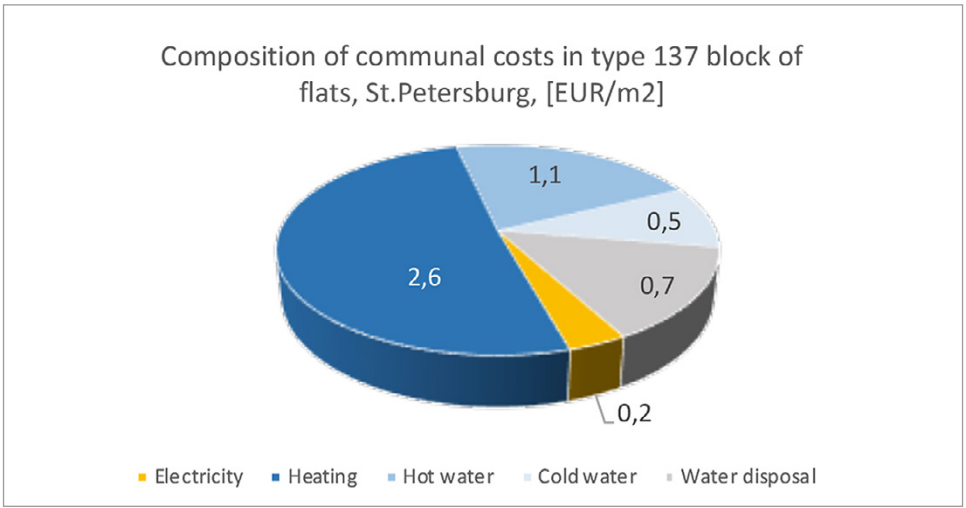


Figure 26. Composition and nominal amount in EUR/m² of communal costs in the study case.

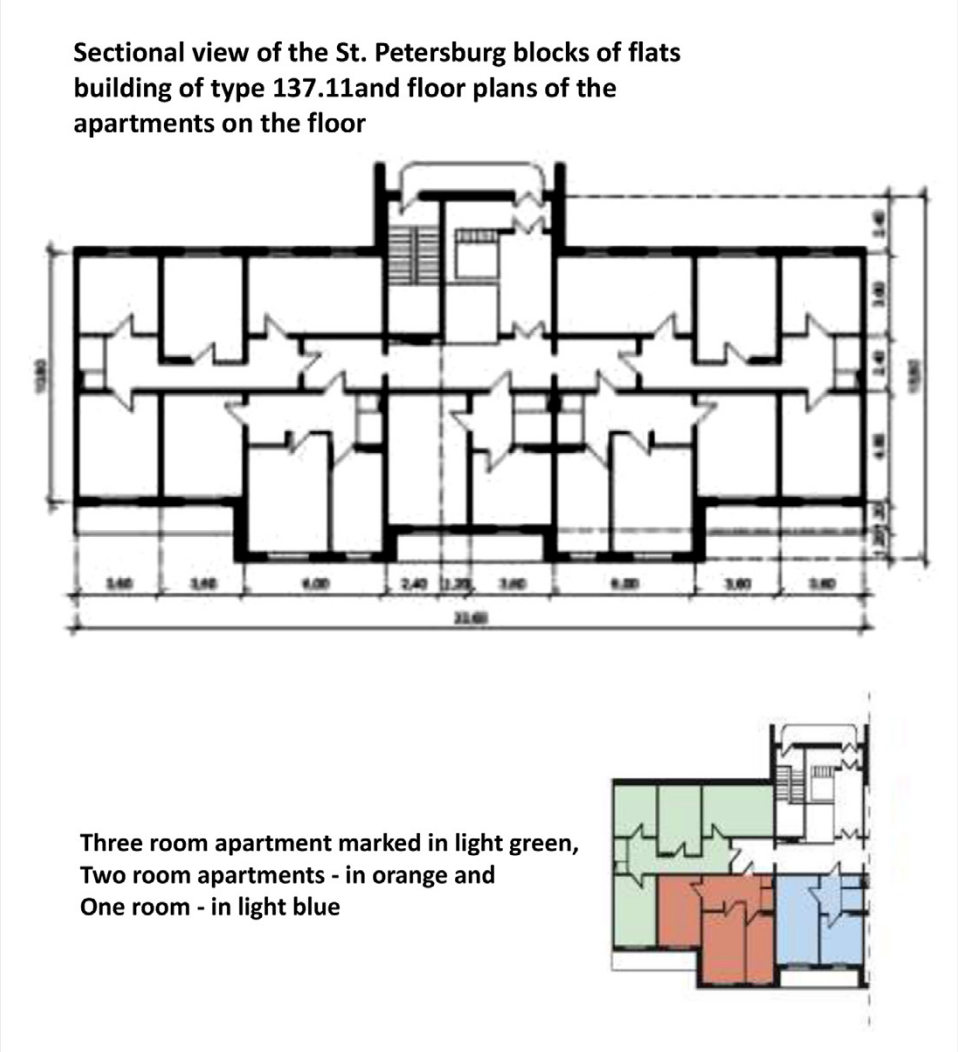


Figure 27. Sectional view of the St. Petersburg series 137.11 house and floor plans of the apartments.

The St. Petersburg Homeowners Association (one of the partners in the Cata3Pult) is implemented heating system modernisation project in 2014 in the same type of block of flats in another district of St. Petersburg. We will utilise existing data on achieved savings in heating energy consumption as estimation of potential for the Kolpino study case within Cata3Pult. In the Table 8 below is presented comparative basic building information.

Table 8. Basic information or content of Building Passport of two block of flats 137.11.2 of the study cases.

	Ul. Tverskaya 45, Kolpino (ZHK 4) https://www.reformagkh.ru/myhouse/profile/view/8606450	Industrialniy pr. 11, b. 2 (TSZH1160) https://www.reformagkh.ru/myhouse/profile/view/9056147
Year of construction	1990	1984
Number of floors:	12	12
Number of entrances/ staircases	4	2
Number of elevators	8	4
Number of inhabitants (in 2014):	680	
Number of apartments	236 (59 per each entrance: 11 one room – 33 м²; 24 – two rooms – 51 м²; 24 three rooms – 76 м²)	214
non-residential units	4	2
Total area of apartments premises, m^2	14 648	10 758
Total volume of building, m^3		47 759
Total area of common property, m^2	2 591,60	
Total area of cadastral object, m^2	6 213	3724
The method of forming a deep refurbishment fund:		On a special account of the organization
Cadastral Number		78:11:6107:16

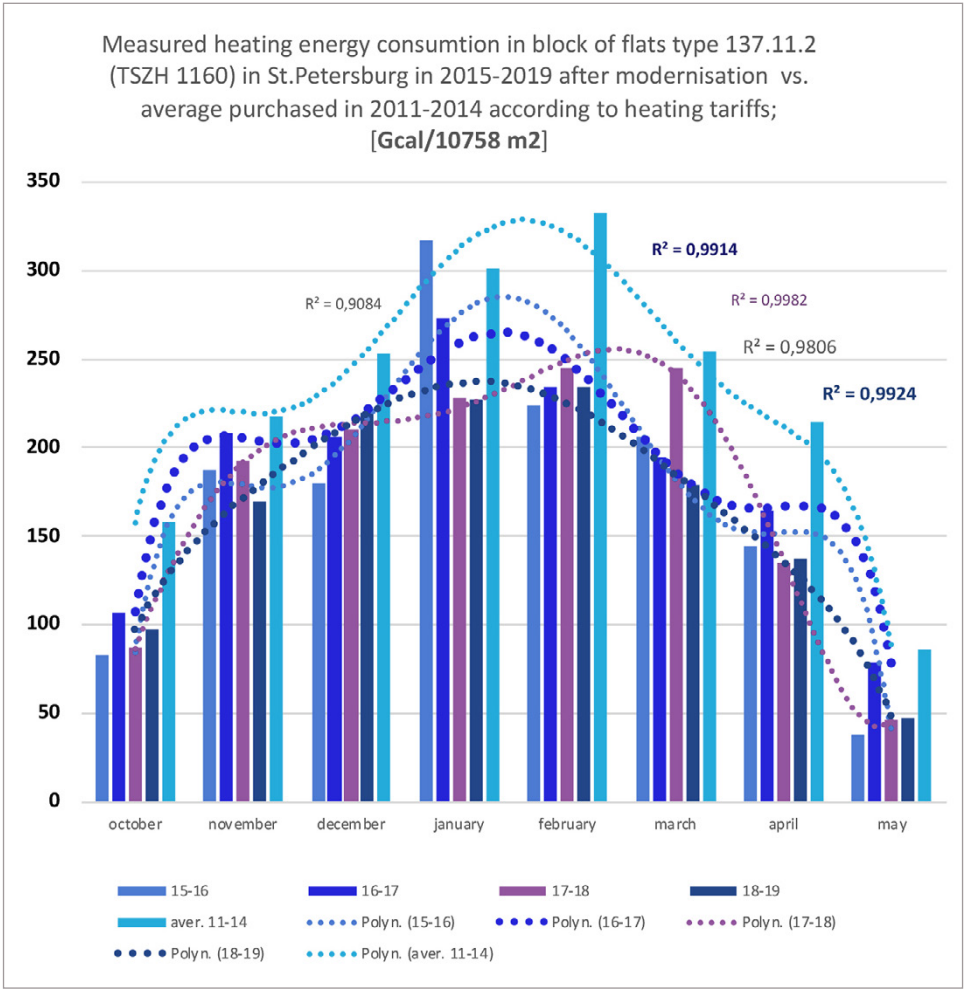


Figure 28. Measured heating energy consumption in the study case building of 137.11.2 after modernisation of heating system vs. average consumption before modernisation.

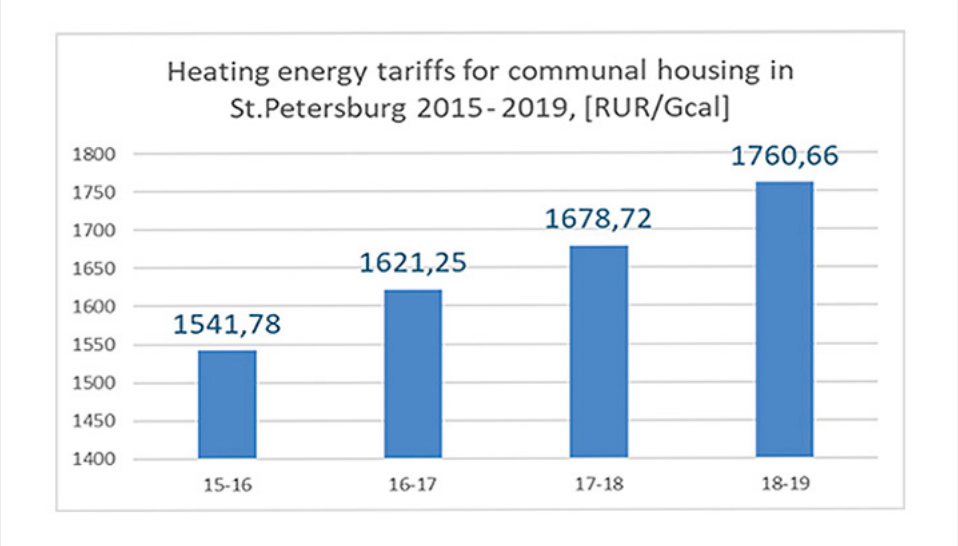


Figure 29. Used numbers of heating tariffs in St. Petersburg (in RUR/Gcal) in 2015 – 2019 as a baseline for calculations of energy savings % in the case study.

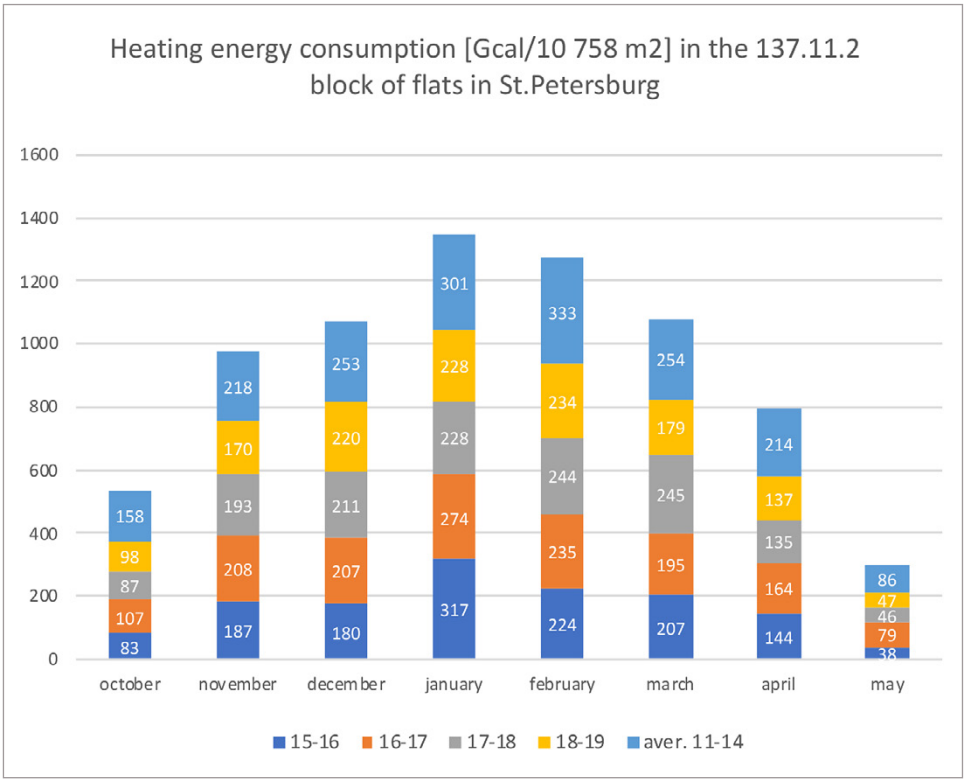


Figure 30. Profile of heating energy consumption in 137.11.2 block of flats by months of the year, indicating also total amount of energy purchased in 2011 – 2019.

Table 9. Calculations results of heating energy savings in the 137.11.2 building (total area is 10 758 m² and 214 apartments) in each heating season during 2015 – 2019 and also total savings – in RUR and Gcal.

	Years after modernisation				Before mod.
	15–16	16–17	17–18	18–19	aver. 2011–2014
Tariff, [RUR/Gcal]	1541,78	1621,25	1678,72	1760,655	
Total cons. [Gcal]	1380,69	1468,55	1540,72	1465,44	
Savings, Gcal	436,2	348,34	276,17	351,45	
Savings, %	24,01%	19,17%	15,20%	19,34%	
Total savings in the heating season, RUR	672524	564746,23	463612,10	618782,20	
october	83,24	107,14	129,23	108,84	158,32
november	187,21	208,39	226,68	211,13	217,6
december	180,38	206,61	231,73	222,01	252,74
january	316,54	273,51	231,73	230,95	301,14
february	224,47	234,94	244,47	244,47	332,65
march	206,59	195,18	181,3	211,68	254,07
april	144,02	163,85	180,29	156,83	214,19
may	38,24	78,93	115,29	79,53	86,18

Facebook post dedicated to wondering "Why scaling of good results did not blow up?"

Translation:

Filed in the table and graph results TSZH1160. Over 4 heating seasons, the heat savings exceeded the total investment (saving 2.78 vs. investment 2.61 million rubles) ! I double-checked the numbers several times - the result was too excellent ... 🏆 But it's all right! The question-amazement was immediately born: why there is no general scaling of success? After all, the same buildings of the 137th series are full, and the technology is simple, and there is a standard energy service contract. What is the catch ?

Original:

"Оформила в таблицу и графику результаты по ТСЖ1160. За 4 отопительных сезона экономия тепла превысила общую сумму инвестиции (экономия 2,78 vs. инвестиция 2,61 миллиона рублей) ! Перепроверяла цифры несколько раз - слишком отличным результат вырисовывался... 🏆 Но всё правильно! Сразу родился вопрос-изумление: почему нет повального масштабирования успеха? Ведь таких же зданий 137-й серии полно, да и технология простая, да и типовой энергосервисный контракт имеется. В чём загвоздка ? "

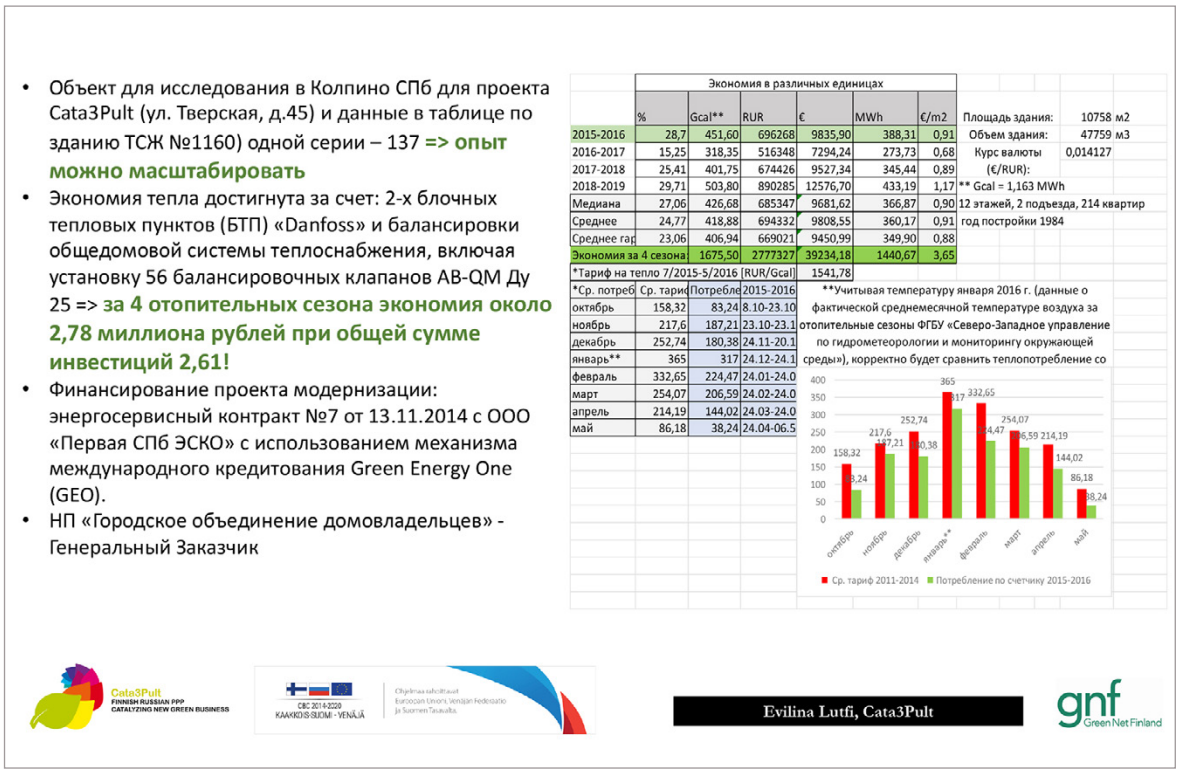


Figure 31. Picture in the post in the Cata3Pult Facebook account on assessment of energy savings results after modernization of heating system in TSZH No1160 of 137.11.2 block of flats in St. Petersburg.
Link: https://www.facebook.com/groups/425389994709099/permalink/544393272808770/.
Author: Evilina Lutfi, 27.12.2019.

8.2 Carbon footprint calculating for Circular economy

Circular economy is a new phenomenon – more intent than reality – everywhere. So, no determined or stabilized terminology or activities. Some of the word combination used in the context of climate or circular economy are presented in the Attachment 1 – Eng-Fi-Ru cleantech glossary (Pages 76 – 83 of the document). A few of them are presented in the table 10 below.

Table 10. Some of the word combination used in the context of climate or circular economy.

антропогенные выбросы	**ihmisen aiheuttamat päästöt**	**anthropogenic emissions**
выбросы двуокиси углерода	**hiilidioksidipäästöt**	**carbon dioxide emissions**
углеродный след	**hiilijalanjälki**	**carbon footprint**
удаление отходов	**jätteiden poisto**	**waste disposal**
повторное использование отходов в качестве сырья	**jätettä uudelleenkäyttö raaka-aineena**	**waste reuse as raw material**

To evaluate or to make assessment of environmental and ecological impact of housing stock existing practice is to account so called carbon or CO2 footprint. In Figure 31 below is presented partly translated (blue box on the right) Facebook post (4.2.2020) dedicated to this subject with description of accounting method used in Finland by Motiva (Source: https://www.motiva.fi/ratkaisut/energiankaytto_suomessa/co2-laskentaohje_energiankulutuksen_hiilidioksidipaastojen_laskentaan/co2-paastokertoimet; Accessed on 4.2.2020 and 10.3.2020).

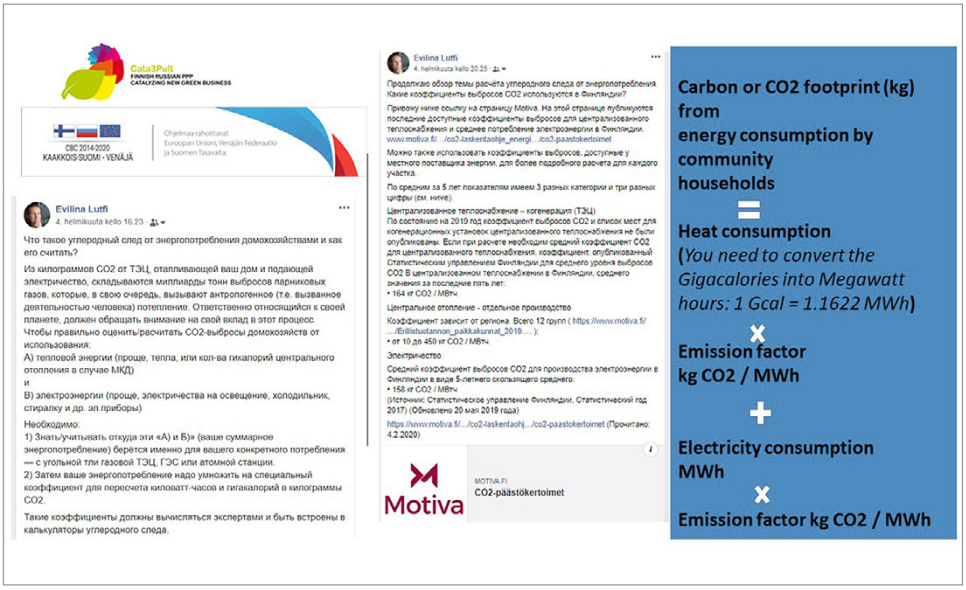


Figure 32. Picture in the post in the Cata3Pult Facebook account on assessment of CO2 footprint of housing with description of accounting method used in Finland by Motiva.
Link: https://www.facebook.com/groups/425389994709099/permalink/572797689968328/.
Author: Evilina Lutfi, 6.2.2020.

Table 11. Linguistic definitions of anthropogenic emissions in the context of Russian Federation (in Russian, Finnish and English).

ilmakehä/ atmosfääri atmosphere	воздух / атмосфера	“vybros” ПДВ предельно-допустимый выброс
vesikehä/ hydrosfääri hydrosphere	вода / гидросфера	“sbros” ПДС предельно-допустимый сброс
kivihehä/ litosfääri lithosphere	почва	“othody” НООЛР норматив образования отходов и лимитов на их размещение

9. Summary and conclusions

Improvement of green and socializing zones and landscaping, as well as the development of housing properties have a high priority in St. Petersburg. This could bring new business opportunities especially for Finnish companies, having a reputation of high quality experts in those areas.

On a general level, developing St.Petersburg is implemented under the federal level *mega-projects*. The most relevant in the context of Cata3Pult focus areas in the **urban environment** are *Creating a comfortable urban environment* and *Clean City*. Housing sector is under the first one. Development of waste management system, maintenance of green zones and landscaping matters, and control on anthropogenic emissions are under the second. In the field of St. Petersburg **industry and technology entrepreneurship and innovations** the most relevant mega-project is *National Technology Initiative*.

State executive power bodies in St. Petersburg, such as Committees on Energy and Engineering, Housing, City Improvement, Nature Use and Environment Protection, Industry Policy, Innovations and Trade are in important roles. They have two main sets of responsibilities and jurisdictions in the dedicated field: ensuring the implementation of State Policy and carry out Public Administration as well coordinating the activities of other executive bodies in state power of St. Petersburg in this field. The Committees have about six subordinate organisations, such as SUEs and SBIs, under their jurisdiction. Heating and electricity, water supply and waste management are all businesses implemented by SUEs. So, if private companies are interested in those business sectors, such businesses are always a subject of communication with public authorities. It is also important to understand that the Committees are not participating into decision-making related to legislation or public procurements.

Business models in energy, infrastructure and waste sectors on city- or district- or quarter-level always have a component of public-private-partnership. The legislation base on environment and ecology, energy, housing and utilities sectors is changing very intensively in Russian Federation. Following the changes in Federal Laws, Codes or/and other national level legislation and understanding their meaning for practical or business level is important. It is also useful to follow the work of Legislative Assembly of St. Petersburg to understand how those changes will be implemented. From the Federal level the laws or legislative acts, declarations, orders, etc. are becoming a part of reality on the market via Law of St.Petersburg.

For development of resource efficiency business within housing or waste management sectors of St.Petersburg, it is important to understand the role of *Regional Operator*, which are *public Funds*, non-commercial organisations. They are operating both the state funds and the mandatory payments for Major repair and Waste management, collected from apartment owners as fixed monthly fee.

Improvement of energy efficiency and indoor air conditions in communal housing, social (such as schools and children day care facilities, student campuses), office and retail buildings, real estate properties management continue providing good business opportunities, especially for Finnish companies. Existing high technology readiness level, experience in advanced and best available technologies, strong domestic references and developed business models form a promising basis for success on St. Petersburg cleantech market. Even though challenges exist, such as import substitution and supporting of local producers, they can be overcome.

Succeeding in St. Petersburg market requires a new approach and operational business models. Current development status especially on cleatech and resource efficiency sectors creates needs and at the same time possibilities to new types of collaboration. And every new way of collaboration should be based on diverse, equal and inclusive approaches. New collaborative business models should be based on creative combination of technologies, design, art, understanding of local specialties – social and environmental – and human-centric communication. Hopefully this Market Watch and the Glossary will provide support in building such new models and cooperation.

Cata3Pult
FINNISH RUSSIAN PPP
CATALYZING NEW GREEN BUSINESS

Yearly arranged events in St. Petersburg relevant to Cata3Pult focus areas

- **Ecology of Big City** (on September 17 – 19 in 2020): environmental protection, nature conservation and resource saving technologies, equipment, technologies and services https://ecology.expoforum.ru/en/
- **InterStroyExpo** (on September 2 – 4 in 2020): building and finishing materials, products for supplying building companies and wholesale and retail trade are presented https://www.interstroyexpo.com/en-GB/
- **Municipal Housing Complex of Russia** (on September 17 – 19 in 2020) https://gkh.expoforum.ru/o-vystavke
- **Energy-saving. Power efficiency expo** (on October 6 – 9 in 2020): specialized project contributing to a comprehensive solution to the energy sector problems in the industry and utilities, infrastructure development areas, energy and environmental security (https://energysaving-expo.ru/en/)

10. Attachment 1:
Mini-glossary on urban cleantech Eng-Fi-Ru

English	Suomennos	Русский (original term in Russian)
achieve a balance of interests	saavutetaan etujen tasapaino	достичь баланса интересов
added value	lisäarvo	добавленная стоимость
advise	neuvo	совет
affordable housing costs	kohtuuhintaisia asumismenot	доступные расходы на жилье
agreement	sopimus	соглашение
antropogenic emissions	ihmisen aiheuttamat päästöt	антропогенные выбросы
apartment	huoneisto	квартира
assessing	arviointi	оценка
assessment of technologies	teknologioiden arviointi	оценка технологий
Association of Ecological Partnership AsEP	Ekologisen kumppanuuden yhdistys AsEP	Ассоциация Экологического Партнёрства (АсЭП)
autonomous	autonominen	автономный
best avaliable technologies	parhaat käytettävissä olevat teknologiat	лучшие доступные технологии
block of flats building	asuinkerrostalo	многоквартирный дом
board of directors of housing company	taloyhtiön hallitus	Совет директоров жилищной компании
building management system	rakennuksen hallintajärjestelmä	система управления зданием
cadastral passport of land plot	tontin passi/todistus kiinteistörekisterissä	кадастровый паспорт земельного участка
carbon dioxide emissions	hiilidioksidipäästöt	выбросы двуокиси углерода
carbon footprint	hiilijalanjälki	углеродный след
catalogue of import substitution	tuonnin korvauksen katalogi	каталог импортозамещения
change of use	käyttötarkoituksen muutos	изменение использования
Charter	perustamiskirja	Устав
city-internal municipal formation	kaupungin sisäinen kunta	внутригородское муниципальное образование
Civil Code	Siviilikoodi	Гражданский Кодекс РФ
collegial advisoring and consulting body	kollegiaalinen neuvotteleva ja konsultoiva taho	коллегиальный совещательный и консультативный орган
combined heat production	yhdistetty sähkön ja lämmön tuotanto - CHP	комбинированное производство тепловой энергии
commercial	kaupallinen	коммерческая
Committee for City Planning and Architectur	Kaupunkisuunnittelu- ja arkkitehtikomitea	Комитет по градостроительству и архитектуре (КГА)
Committee on Energy and Engineering	Energia- ja kuntatekniikkakomitea	Комитет по энергетике и инженерному обеспечению
Committee on Housing	Asumiskomitea	Жилищный комитет

Committee on Industrial Policy, Innovation and Trade of St. Petersburg	Teollisuuspolitiikka-, innovaatio- ja kauppakomitea	Комитет по промышленной политике, инновациям и торговле Санкт-Петербурга
Committee on Nature Use, Environmental Protection and Ecological Safety	Ympäristökomitea (luonnon varojen käyttö, ympäristösuojelu ja -turvallisuus)	Комитет по природопользованию, охране окружающей среды и обеспечению экологической безопасности
Committee on Property Relations	Omaisuussuhdekomitea (mm. ylläpitää avoin GIS-järjestelmä http://www.rgis.spb.ru/map/MainPages/AboutService.aspx)	Комитет имущественных отношений (КИО)
Committee on Tariffs	Tariffien komitea (mm. http://tarifspb.ru/komitet/structure/)	Комитет по тарифам
Committee on the improvement of St. Petersburg	Kaupungin kunnossapito (ml. puistot, kadut, yhdyskuntajätehuolto)	Комитет по благоустройству Санкт-Петербурга
Committee on Urban Planning and Architecture	Kaupunkisuunnittelun ja arkkitehtuurin komitea	Комитет по градостроительству и архитектуре
common property	yhteisomistuksessa olevat / yleiset tilat	имущество общего пользования
community association	Community Association	общественное объединение
community housing	yhteisöasuminen	проживание в многоквартирных домах, таунхаусах или ином чем индивидульном/частном доме
concepts	käsitteistö	концепции
concession agreement	käyttöoikeussopimus tai konsessio	концессионный договор
consensus decision	yksimielisellä päätöksellä	решение консенсуса
consortium	konsortio	консорциум
construction	rakenne	сооружение
construction and conservation	rakentaminen ja konservointi	строительство и консервация
consulting	konsultointi	консалтинг
co-operation	yhteistyö	сотрудничество
corridor	käytävä	коридор
decentralized generation	hajautettu tuotanto	децентрализованное производство
demolition	purku	снос
demonstration project	demohanke	демонстрационный проект
department of perspective development	kehitystä hallinnoiva osasto	управление перспективного развития
design	suunnittelu	проектирование
development project	kehityshanke	проект развития
discussion	keskustelu	обсуждение
distribution	jakelu	распределение
district/central heating	kaukolämpö	центральное отопление
Ecological Council	Ympäristöneuvosto	Экологический Совет
Ecological office KOSMOS LLC	Toimisto “Kosmos”	Экологическое бюро «КОСМОС»

Ecological Safety	Ympäristöturvallisuus	экологическая безопасность
economic management	taloudellinen hallinta	хозяйственное ведение
energy company	energiayhtiö	энергетическая компания
energy efficiency	energiatehokkuus	энергоэффективность
Energy service contract ESCO	Energia-palveluna -sopimus	Энергосервисный контракт
energy-as-a-service	energia-palveluna	энергия как-сервис
Environmental Protection	Ympäristönsuojelu	охрана окружающей среды (ООС)
environment-friendly	ympäristöystävällinen	экологически чистые
equipment installation	laiteasennukset	монтаж/установка оборудования
equipment with low consumption	matalan kulutuksen laitteet	оборудование с низким потреблением
event	tapahtuma	событие
executive bodies of state power	valtion vallan toimeenpanoelimet	исполнительные органы государственной власти (ИОГВ)
exercise of authority	toimivaltuuksien toteutus	осуществления полномочий
exhaust air	poistoilma	отработанный воздух
experience exchange project	kokemusten vaihto projekti	проект обмена опытом
experiment	koe	эксперимент
experiment project	kokeiluprojekti	экспериментальный проект
export support project	vienninedistämisen hanke	Проект по поддержке экспорта
Federal Law	Venäjän federaation laki	Федеральный Закон Российской Федерации (ФЗ РФ)
Federal State Statistic Service	Valtion tilastopalvelu	Федеральная Служба Государственной Статистики
Federal Waste Classification Catalog	Valtion jäteluokkien katalogi	Федеральный классификационный каталог отходов (ФККО)
fresh air filter	raitisilmasuodatin	фильтр входящего воздушного потока
Fuel and Energy Complex	energian toimituksen keskittymä	топлвно-энергетический комплекс (ТЭК)
General Plan	Yleiskaava	Генеральный план
geothermal heat pump	geolämpöpumppu	гео-теплонасос
green economy	vihreä talous	зеленая экономика
gross floor area	kerrosala	общая площадь помещения
Gross Regional Product (GRP)	Alueellinen bruttokansantuote	Валовый региональный продукт (ВРП)
ground source heat pump	maalämpöpumppu	тепловой насос, использующий тепло недр земли
Head of local administration	paikallishallinnon johtaja	Глава местной администрации
heat distribution unit	lämmön jakelu yksikkö	блок распределения тепла
heat generation	lämmöntuotanto	генерация тепла
heat pump	lämpöpumppu	тепловой насос
heat recovery ventilation	lämmöntalteenotto poistoilmasta	вентиляция с рекуперацией тепла

heat seasonal storage	lämmön kausivarastointi	сезонная аккумуляция тепловой энергии
heatinsulation	lämpöeristys	теплоизоляция
help	apu	помощь
home property owners association	kodin kiinteistönomistajien yhdistyksen	дома владельцы недвижимости ассоциации
housing allowance	asumistuki	пособие на жилье
Housing and municipal infrastructure facilities	Asuinkiinteistö- ja kunnallistekniikkaomaisuus	Жилищно-коммунальное хозяйство (ЖКХ)
housing association of block of flats	asunto-omistajien yhdistys	товарищество собственников жилья
housing cooperative	asumisosuuskunta	жилищный кооператив
import substitution	tuonnin korvaaminen	импортозамещение
in accordance with...	... mukaisesti	в соответствии с...
industrial facility	teollisuuslaitos	промышленный объект
Infrastructure	infrastruktuuri	инфраструктура
inspection	valvonta	инспекция
intellectual property rights	immateriaalioikeudet	право интеллектуальной собственности
International consortium “St. Petersburg cleantech cluster for urban environment”	Pietarin cleantech -klusteri	Международный консорциум “Санкт-Петербургский Кластер Чистых Технологий для городской среды”
in-use	käytössä	в использовании
investment project	investointihanke	инвестиционный проект
joining efforts	pyrkimyksien yhdistäminen	объединения усилий
joint enterprise	yhteisyritys	совместное предприятие
Land Code	Maakoodi	Земельный кодекс (ЗК)
land plot	tontti	земельный участок (ЗУ)
land survey	maanmittaus	межевание участка
landplot	tontti	земельный участок
laskenta	calculation	расчёт
leasing agreement	leasing-sopimus	договор лизинга
legislation	lainsäädäntö	законодательство
Legislative Assembly	Lakiasäätävä kokous	Законодательное Собрание (ЗакС)
Leningradskaya oblast	Leningradin alue	Ленинградская область
letter of intent	aiesopimus	письмо о намерениях
life-cycle	elinkaari	жизненный цикл
living conditions	elinolot	условия жизни
living environment	elinympäristö	среда обитания
local budget expenditures	paikallisbudjetin menot	расходы местного бюджета
local budget revenues	paikallisbudjetin tulot	доходы местного бюджета
local self-government bodies	paikalliset itsehallintoelimet	органы местного самоуправления
low-carbon economy	vähähiilinen talous	низкоуглеродная экономика
machine ventilation	koneellinen ilmanvaihto	машинная вентиляция
main contractor	pääurakoitsija	основной подрядчик
maintenance repairs	kunnossapitopalvelut	текущий ремонт
major repair	peruskorjaus	капитальный ремонт

majority decision	enemmistöpäätös	решение большинством голосов
management	hallinnointi	управление
management company of block of flats	kerrostalon hallinnointiyhtiö	управляющая компания многоквартирного дома
manufacturing plant	tuotantolaitos	завод
material flow	materiaalivirta	поток материала
meeting	tapaaminen	встреча
memorandum of understanding (MoU)	yhteisymmärryksen lausuma	меморандум о взаимопонимании
metering	mittaus	измерение
Metropolia University of Applied Sciences	Metropolia ammattikorkeakoulu (AMK)	Высшая школа прикладных наук Metropolia
ministry	ministeriö	министерство
modernization	modernisointi	модернизация
movement sensor	liikeanturi	датчик движения
Municipal Formation (MF)	kaupungin sisäinen kunta	муниципальное образование (МО)
Municipal solid waste (MSW)	Yhdyskuntajäte	твердые коммунальные отходы (ТКО)
municipal/social housing	kunnan omistamia ja vähävaraisille vuokrattuja asuntoja	муниципальное/ социальное жилье
municipality-owned	kunnan omistama	муниципальная собственность
Nature Use	Luonnon käyttö	природопользование
negotiations	neuvottelut	переговоры
networking	verkostoituminen	сетевое взаимодействие
Noncommercial Partnership «The St. Petersburg House Property Owners Association»	Pietarin asunto-omistajien yhdistys	Некоммерческое партнёрство “ГОРОДСКОЕ ОБЪЕДИНЕНИЕ ДОМОВЛАДЕЛЬЦЕВ”.
non-juridical entity	ei-juridinen kokonaisuus	не-юридическое лицо
non-residential building	muu kuin asuinrakennus	нежилое здание
objects for generation, transmission and distribution of electrical energy	sähköenergian tuotannon, siirron ja jakelun objektit	объекты по производству, передаче и распределению электрической энергии
objects of heat supply, centralized systems of hot water supply, cold water supply and (or) drainage, separate objects of such systems	lämmöntuotannon kohteet, keskitetyt kuuman vesihuollon järjestelmät, kylmän veden syöttö ja (tai) jäteveden poisto, tällaisten järjestelmien erilliset kohteet	объекты теплоснабжения, централизованные системы горячего водоснабжения, холодного водоснабжения и (или) водоотведения, отдельные объекты таких систем
observation	havainto	наблюдение
one-room flat	yksiö	однокомнатная квартира
operation and maintenance	käyttö ja pienet huoltotoimenpieet ja korjaukset	эксплуатация и текущие ремонты
operation of block of flats	kerrostalon käyttö	эксплуатация многоквартирного дома
operational management	operatiivinen johtaminen	оперативное управление
order	asetus	приказ
ownership	omistus	собственность
partnership	kumppanuus	партнерство
pilot project	pilottiprojekti	пилотный проект

practice	harjoittelu	практика
premise	tila	помещение
primary product	ensisijainen tuote	основной продукт
production capacity	tuotantokapasiteetti	производственные мощности
profile of energy consumption	energian käytön profiili	кривая использования энергии
property management	kiinteistöjen isännöinti	управление недвижимостью
public council	kansalaisten muodostama neuvova elin	общественный совет
public or state-owned institution	julkisen tai valtion omistama laitos	казенное учреждение
public-private alliance	julkisen ja yksityisen sektorin allianssi	государственно-частный альянс
Public-Private Partnership	Valtion ja yksityisen sektorin kumppanuus	государственно-частное партнерство
purpose of usage of construction unit	rakennuksen käyttötarkoitus	целевое назначение объекта строительства
quality of life	elämänlaatu	качество жизни
real condition	todellinen kunto	реальное состояние
real estate property	kiinteistö	недвижимость
recommendation	suositus	рекомендация
reconstruction	jälleenrakennus	реконструкция
refurbishment	kunnostus	ремонт
Regional major repair program for common property in block of flats buildings in St. Petersburg	Pietarin alueellinen kerrostalojen peruskorjausohjelma	Региональная программа капитального ремонта общего имущества в многоквартирных домах в Санкт-Петербурге
regional operator for the major repair program for common property in block of flats buildings in St. Petersburg	Pietarin alueellinen säätiö – kerrostalojen peruskorjausohjelman operaattori	региональный оператор капитального ремонта общего имущества в многоквартирных домах (НО «ФКР МКД СПб»)
registration of real estate property	kiinteistöjen rekisteröinti	регистрация недвижимости
regular maintenance repairs	säännölliset huoltokorjaukset	регулярное ремонтное обслуживание
regulatory framework	sääntelykehys	нормативно-правовая база
rental apartment	vuokra-asunto	квартира в аренде/-у
repair	korjaus	ремонт
request for tenders	tarjouspyyntö	запрос на тендеры
requirement	vaatimus	требование
requirement of two-third of votes	kahden kolmasosan äänimäärästä vaatimus	требование двух третей голосов
research	tutkimus	исследование
residential	asuin-	жилой/-е/-я
residential use	asuinkäyttöön	использование в жилых помещениях
resource-wise	resurssiviisas	ресурсо-умный
right of owner	omistajan oikeus	право владельца
room	huone	комната
Rospotrebnadzor	Venäjän kulutuksen valvonta	Роспотребнадзор

Rosprirodnadzor (Russian Federal Service for Supervision of Natural Resources)	Venäjän luonnonvarojen valvonta	Росприроднадзор
Rostehnadzor	Venäjän tekninen valvonta	Ростехнадзор
Rules on Land Use and Construction	Maankäytön ja rakentamisen määräykset	Правила землепользования и застройки (ПЗЗ)
Russian Federation	Venäjän federaatio (VF)	Российская Федерация
Saint Petersburg / St. Petersburg	Pietari	Санкт-Петербург
Saint Petersburg State University of Information Technologies, Mechanics and Optics	ITMO -ylopisto (IT, mekaaniikka ja optiikka)	Санкт-Петербургский национальный исследовательский университет информационных технологий, механики и оптики ИТМО
science	tiede	наука
Scientific and Technical Council in the field of housing and communal services of St. Petersburg under the Committee on Housing	Pietarin asuntokomitean alainen tieteellinen ja tekninen neuvosto asumis- ja kunnallispalvelujen alalla	Научно-технический совет в сфере жилищно-коммунального хозяйства СПб при Жилищном комитете
Scientific-technical council	Tieteellis-tekninen neuvosto	Научно-технический совет НТС
seizure of the property	omaisuuden takavarikoiminen	изъятие объекта недвижимости
share-owners	osakkeenomistajia	владельцы акциями
simulation	simulointi	моделирование
socio-economic development	sosioekonominen kehitys	социально-экономическое развитие
solution	ratkaisu	решение
square meters	neliömetriä	квадратные метры
St. Petersburg Chamber of Commerce SPbCC	Pietarin kauppakamari	Торговопромышленная палата Санкт-Петербурга ТПП СПб
state budgetary institution	valtion budjettilaitos	государственное бюджетное учреждение ГБУ
State Housing Inspectorate of St. Petersburg (adopted in the report abbr. is Hins.)	Pietarin valtiollinen asumistarkastuslaitos	Государственная жилищная инспекция Санкт-Петербурга
State Treasure Institution	Valtion kassalaitos (“GKU”)	Государственное казённое учреждение (ГКУ)
State Unitary Enterprise SUE	Valtiollinen yritys (“GUP”)	Государственное унитарное предприятие (ГУП)
Structure scheme	Rakennekaava	Структурная схема
sub-rent apartment	asunnon alivuokraus	суб-аренда квартир
support of local producer	paikallisten tuottajien tukeminen	поддержка местного производителя
surplus material	materiaalin ylijäämää	излишек материала
technical age	tekninen ikä	технический возраст
technology readiness level TRL	teknologian valmiustaso	уровень готовности технологии
tendering process	tarjouskilpailun menettelyprosessi	процесс торгов
test project	testiprojekti	тестовый проект

The Geographic Information System of St. Petersburg (RGIS)	Pietarin geografinen tietojärjestelmä	«Геоинформационная система Санкт-Петербурга» (РГИС)
The program "Development of Built-Up Territories in St. Petersburg"	Ohjelma "Rakennettujen alueiden kehittäminen Pietarissa"	Программа «Развитие застроенных территорий в Санкт-Петербурге»
Unified State Register of Real Estate	valtion yhteinen kiinteistörekisteri	Единый Государственный Реестр Недвижимости (ЕГРН)
unit of construction for permanent use	pysyvään käyttöön tarkoitettuja rakennelmia	объекты капитального строительства
unit of construction for short-time use	väliaikaiseen käyttöön tarkoitettuja rakennelmia	объекты временного строительства
Urban Planning Code	kaupunkisuunnittelun koodi/ tai asiakokonaisuuden säätävien lakien yhdistelmä	"Градостроительный кодекс Российской Федерации" ГрК РФ
value chain of product	tuotteen arvonluomisen ketju	цепочки создания стоимости продукта
waste polygon	kaatopaikka	полигон отходов
waste reuse as raw material	jätettä uudelleenkäyttö raaka-aineena	повторное использование отходов в качестве сырья
waste sorting	jätteiden lajitteluun	сортировка отходов
waste-to-energy plant	jätevoimala	завод по генерации энергии из отходов
water treatment facilities	vedenkäsittelylaitos	водоочистительные сооружения
weather controlled automation system	sää ohjattu automaatiojärjestelmä	погодорегулируемая система автоматизации
well-maintained building	hyvin hoidettu rakennus	благоустроенное здание

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