



UNITED NATIONS
INDUSTRIAL DEVELOPMENT ORGANIZATION



ANNUAL REPORT 2017



© UNIDO Centre for International Industrial Cooperation in the Russian Federation. Annual Report 2017

This document has been produced without formal United Nations editing. The designations employed and the presentation of the material in this document do not imply the expression of any opinion whatsoever on the part of the UNIDO Centre for International Industrial Cooperation in the Russian Federation concerning the legal status of any country, territory, city or area or of its authorities, or concerning its economic system or degree of development. Designations such as “developed”, or “developing” are intended for statistical convenience and do not necessarily express a judgement about the stage reached by a particular country or area in the development process. Mention of firm names or commercial products does not constitute an endorsement by the UNIDO Centre for International Industrial Cooperation in the Russian Federation.

Photos © UNIDO, UNIDO Centre for International Industrial Cooperation in the Russian Federation, Plixabay, Shutterstock


Contents

1 About the UNIDO Centre 4

2 Highlights in 2017 6

3 Projects in the Russian Federation 17

 **1. Market Transformation Programme on Energy Efficiency in GHG-Intensive Industries in Russia** 17

 **2. Environmentally Sound Management and Final Disposal of PCBs at the Russian Railroad Network and other PCB Owners** 25

 **3. Industrial Innovation Club** 37

 **4. E-Waste Academy for CIS Countries** 41

4 Publications 45

5 Internet resources 46

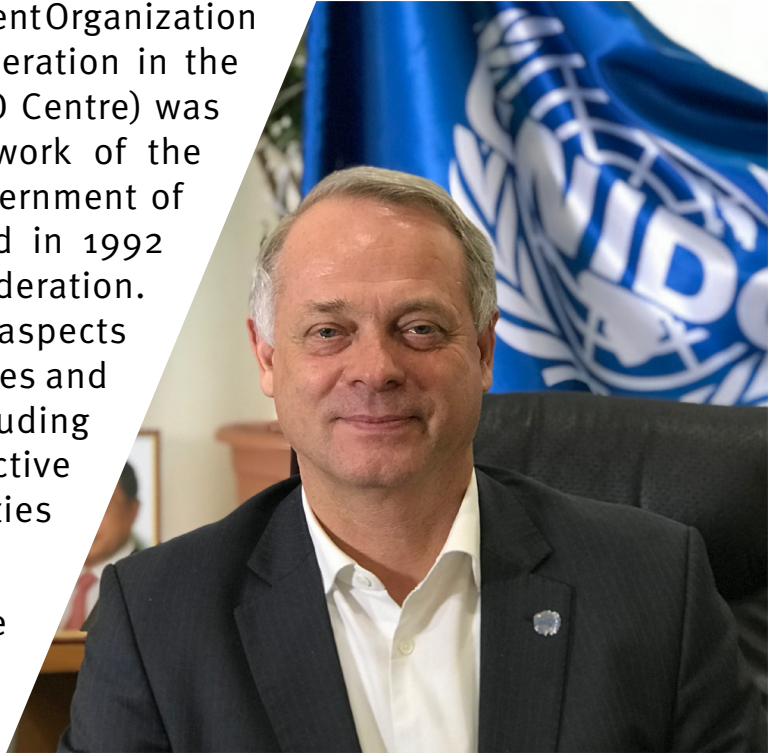
About the UNIDO Centre

1

The United Nations Industrial Development Organization Centre for International Industrial Cooperation in the Russian Federation (hereinafter – UNIDO Centre) was established in 1989 within the framework of the Agreement between UNIDO and the Government of the USSR. The Agreement was renewed in 1992 with the Government of the Russian Federation. The Agreement stipulates general legal aspects of the Centre’s status, objectives, activities and priority tasks. All financial matters, including project budget, are set forth in the respective Trust Fund Agreement between the parties signed in December 2008.

The main objective of the UNIDO Centre is to promote international cooperation in the economic, technological, industrial and scientific spheres between Russian enterprises, associations and organizations, and firms from developed and developing countries.

The UNIDO Centre gives special attention to environmental considerations, the development of small and medium enterprises (SMEs) and generation of employment in line with UNIDO strategies and policies in these fields. The Centre places great emphasis on promotion of the UNIDO’s vision of inclusive and sustainable industrial development (ISID) in developing countries and countries with economies in transition and promotion of international industrial cooperation.



**Director of the UNIDO Centre
in the Russian Federation
Sergey Korotkov**



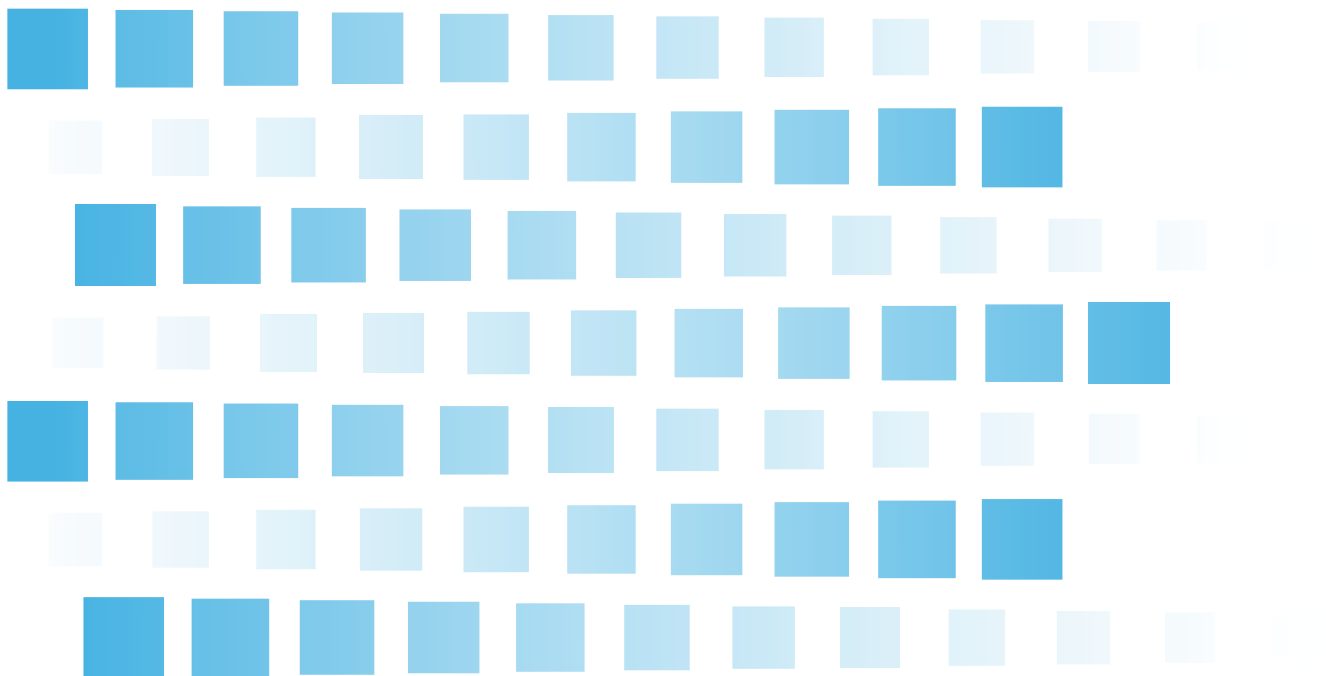
ISID

**INCLUSIVE AND
SUSTAINABLE
INDUSTRIAL
DEVELOPMENT**

The UNIDO Centre benefits Russian institutions involved in investment promotion by upgrading skills of local staff of these institutions using UNIDO tools and methodologies and by expanding coverage of their activities. Target beneficiaries are also private enterprises, institutions and governments in developing countries and countries with economies in transition, which will have increased possibilities to enter into different forms of partnerships with industrial enterprises in the Russian Federation.

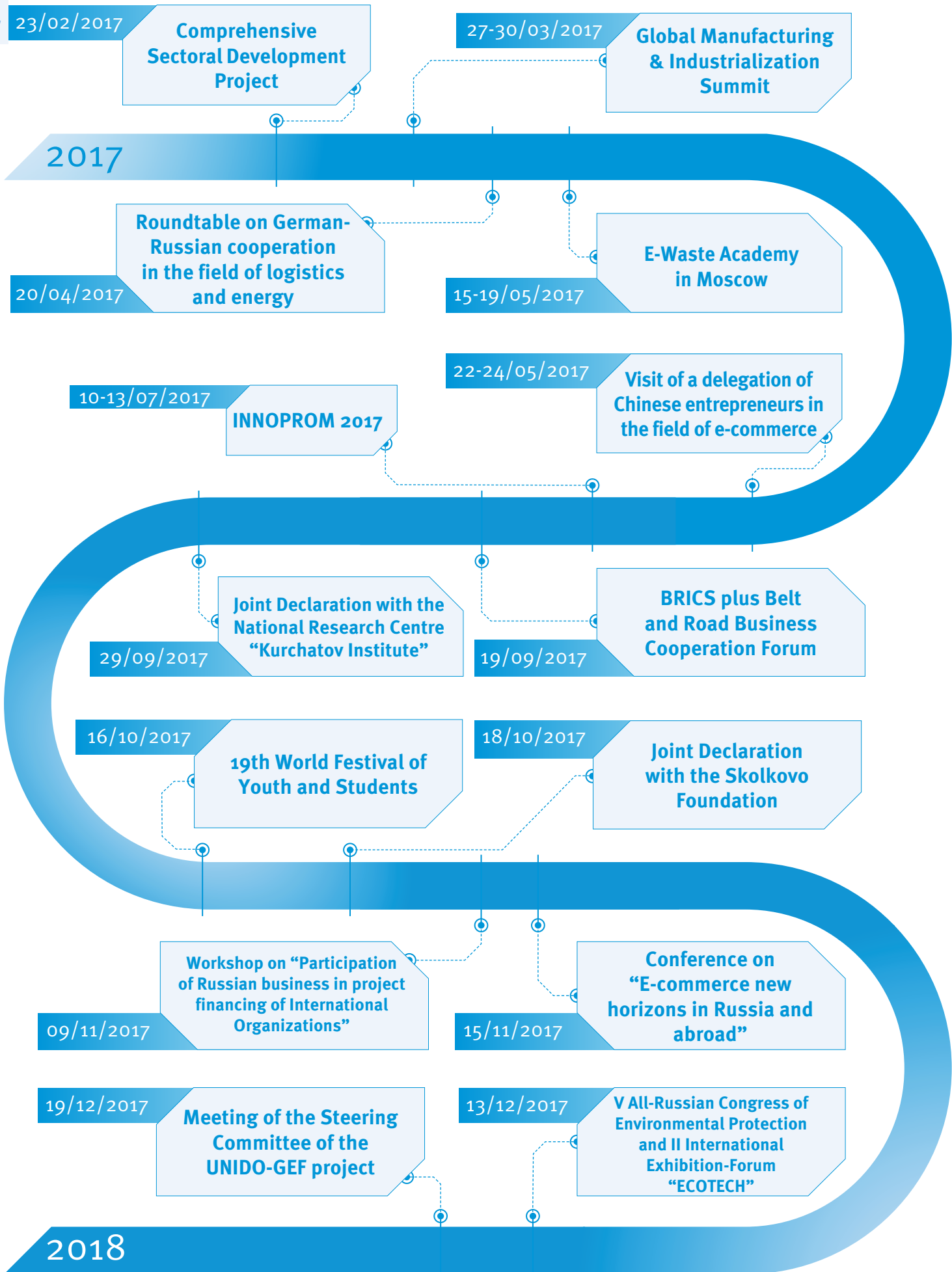
The UNIDO Centre contributes to a substantial increase of the number of industrial projects implemented in the Russian Federation with foreign participation as well as to open new markets in developing countries and countries with economies in transition for potential Russian investors.

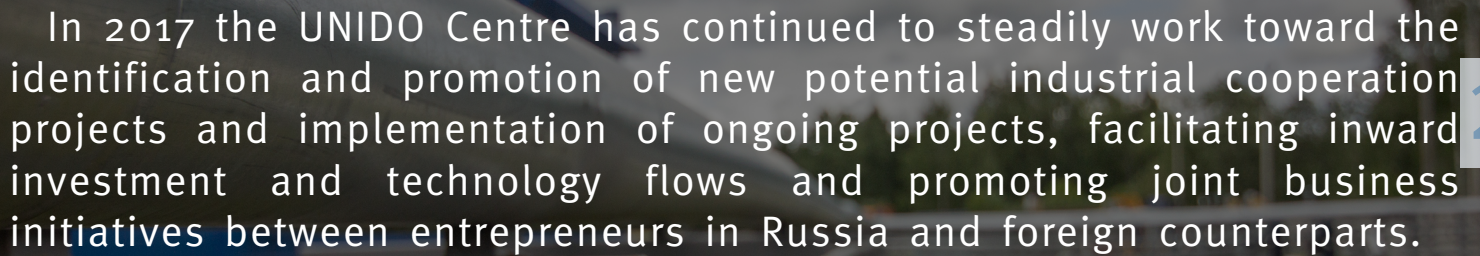
Through the support of the UNIDO Centre, SMEs in Russia can enhance their knowledge and experience on how to establish cooperation with foreign partners in other countries. The UNIDO Centre is closely linked with the UNIDO worldwide Investment and Technology Promotion Network (ITPO Network). This results in an increased number of investment and cooperation projects under promotion, negotiation and implementation.



Highlights in 2017

2



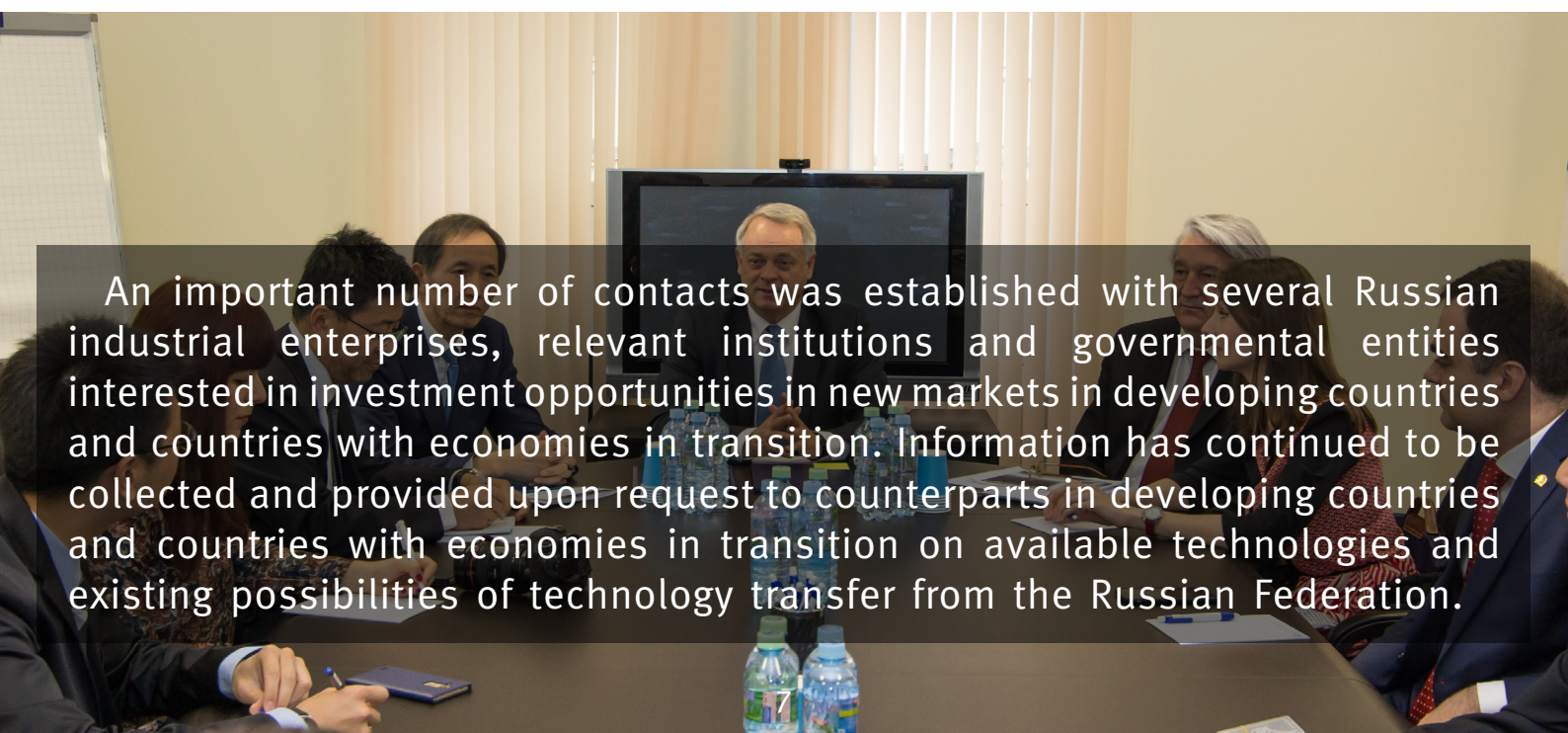


In 2017 the UNIDO Centre has continued to steadily work toward the identification and promotion of new potential industrial cooperation projects and implementation of ongoing projects, facilitating inward investment and technology flows and promoting joint business initiatives between entrepreneurs in Russia and foreign counterparts.

2

During the reporting period the UNIDO Centre was implementing the following projects:

-
- **Market Transformation Programme on Energy Efficiency in GHG-Intensive Industries in Russia**
 - **Environmentally Sound Management and Final Disposal of PCBs at the Russian Railroad Network and other PCB Owners**
 - **Industrial Innovation Club**
 - **E-Waste Academy for CIS Countries**
-



An important number of contacts was established with several Russian industrial enterprises, relevant institutions and governmental entities interested in investment opportunities in new markets in developing countries and countries with economies in transition. Information has continued to be collected and provided upon request to counterparts in developing countries and countries with economies in transition on available technologies and existing possibilities of technology transfer from the Russian Federation.



23 February 2017

Discussions on the Comprehensive Sectoral Development Project

Within the framework of the Russian Textile and Light Industry Week, organized by Soyuzlegprom in Moscow, discussions were held with Russian enterprises of the sector on the Comprehensive Project of the UNIDO Centre and Shanghai Cooperation Organization Business Club “Development of textile industry in Russia 2016-2020”.

The events of the business programme of the Textile Week were dedicated to the issues of localization of production in Russia, creation of textile clusters, development and implementation of new technologies, measures of State support and investment incentives in the sector, system management of industrial projects at all stages of the innovative cycle, which are consistent with the tasks defined by the Comprehensive Sectoral Project, initiated by the UNIDO Centre.

During the Textile Week questions were raised as to the cross-sectoral cooperation. In particular, interaction between

foundry industry and mechanical engineering sector for the development of textile machinery, and cooperation with the Russian Academy of Sciences on research and development for the needs of the sector were discussed.



These topics are in line with the objectives of similar projects, initiated by the UNIDO Centre and consolidated under the programme of comprehensive sectoral projects of industrial development: “Development of foundry industry 2016-2020” and “Technological development of agricultural production of Russia 2016-2020”, which have received approval from the Ministry of Economic Development of the Russian Federation and Russian Academy of Sciences.



27 – 30 March 2017

Russian delegation at the Global Manufacturing & Industrialization Summit

Russian delegation, headed by the First Deputy Minister of Industry and Trade of the Russian Federation Gleb Nikitin participated in the Global Manufacturing & Industrialization Summit in Abu Dhabi. The UNIDO Centre Director Sergey Korotkov also participated in the Summit.

Thanks to UNIDO Centre’s support, the delegation consisted of over 20 organizations. They represented research institutes and enterprises specialized

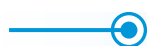
in such fields of innovative technologies as robotics, cyber security of industrial facilities, object data storage, venture investment, development of transport corridors, clean recycling technology, showcasing such diverse inventions as augmented reality glasses, integrated platform for Internet of Things, drones and their charging stations, nanostructured fertilizers, micro open-cell foams, innovative light weight concrete, smart furniture and windows, industrial air conditioners. Some of the product samples were showcased at the collective stand of the Russian Federation set up by the Russian Export Centre.

Russian delegates spoke at various panel discussions, their presentations and reports aroused interest of the Summit participants.



On the sidelines of the Summit, the UNIDO Centre Director participated in the meeting between the First Deputy Minister and UNIDO Director General LI Yong on the development of further cooperation.

LI Yong highlighted the important role of the Russian Federation as a donor of UNIDO and emphasized the need to further promote the transfer of Russian expertise and technologies to other countries through the existing network of UNIDO Investment and Technology Promotion Offices.



20 April 2017

Roundtable on German-Russian cooperation in the field of logistics and energy

The German-Russian roundtable was held on the occasion of the working visit to Moscow of the delegation from the Ministry for Energy, Infrastructure and Digitalization of the federal state of Mecklenburg-West Pomerania, led by Minister Christian Pegel. The delegation included representatives of business community of the federal state, notably heads of major German sea ports and companies specialized in the production of energy from renewable sources. The event was moderated by Minister Christian Pegel, representative of “Deutsche Bahn Schenker Rail” Uwe Leuschner, and national expert of the UNIDO Centre Svetlana Erkenova.

The roundtable enabled representatives of the Ministry of Natural Resources and Environment of the Russian Federation, Russian Energy Agency of the Ministry of Energy of the Russian Federation, FGUP “Rosmorport”, and Russian companies working in the



field of maritime transport, port infrastructure, industrial cybersecurity and renewable energy sources to discuss prospects for developing joint projects with their German colleagues. The successful experience of the UNIDO Centre in assisting the development and implementation of international projects in the above-mentioned fields was presented by the UNIDO Centre Director.

In conclusion of the meeting, the participants thanked the UNIDO Centre for supporting the establishment of business contacts and agreed to continue discussions on prospects for cooperation.



15 – 19 May 2017

2 E-Waste Academy in Moscow

A training course of the E-Waste Academy, Managers Edition, took place in Moscow.

The course was organized by the UNIDO Centre in collaboration with the United Nations University, under the financial assistance of the German Environment Agency (UBA) and methodological and organizational support of the international organization for e-waste disposal StEP Initiative and the WEEE Recyclers Association.

The course gathered over 30 participants representing ministries and governmental agencies, business associations and non-commercial organizations from 8 countries of the Commonwealth of Independent States (CIS): Azerbaijan, Armenia, Belarus, Kazakhstan, Kirgizstan, Russia, Tajikistan, Uzbekistan. The lectures of the course were

delivered by international experts from a number of leading organizations for waste management from: Austria, Belgium, UK, Germany, Italy, Portugal, Russia, Switzerland and Czech Republic.

One of the key parts and results of the course were the action plans on developing an environmentally-sound and commercially attractive system of e-waste management for a chosen country or region, that were prepared and presented by the working groups of participants.

The course of the E-Waste Academy has laid the foundations to intensify an active fruitful cooperation among the experts in e-waste management from the CIS Member States and facilitate the exchange of knowledge and experience among them.





22 – 24 May 2017

Visit of a delegation of Chinese entrepreneurs in the field of e-commerce

A delegation of Chinese entrepreneurs in the field of e-commerce undertook a visit to Moscow within the framework of the UNIDO interregional project “Promote the development and cooperation of SMEs between China and other BRICS countries through e-commerce development”.

The visit of Chinese e-commerce sector leaders and representatives of UNIDO Headquarters was organized in conjunction with the Business Forum “Russia-China cooperation in the field of cross-border e-commerce” and the Russia-China B2B workshop on e-commerce. The events were organized by UNIDO in cooperation with the China Council for the Promotion of International Trade, the Chamber of Commerce and Industry of the Russian Federation, the Ministry of Industry and Trade of the Russian Federation and the Russian Export Centre.

The events provided an opportunity for 70 Chinese and more than 200 Russian

participating companies to establish business contacts and discuss prospects for cooperation in the field of cross-border e-commerce between the two countries. The discussions focused on information exchange, search for new solutions in the area of e-commerce, definition of common approaches to the sector development.

2



During the visit, a cooperation agreement was signed between the Global Science and Technology Innovation Centre, established on the basis of the Shanghai Academy of Social Sciences, and the UNIDO Centre. The document foresees enhancement of interaction between the two parties within the framework of the project for the creation of a global innovation network on inclusive and sustainable industrial development.



10 – 13 July 2017

INNOPROM 2017

The annual international exhibition of industry’s latest achievements and innovative technologies held in Ekaterinburg, was organized for the eighth time in 2017, and was dedicated to the theme “Smart Manufacturing. Global Approach. Global Industrial Development Trends”.

Over the course of four days, 150 discussions were held under 12 thematic tracks attended by more than 500 internationally recognized speakers and experts from Europe, Asia, Africa and America.

The UNIDO Centre Director participated as a speaker in the panel discussion “New INDUST-REALITY: sustainable development and nature-like technologies”. UNIDO’s experience of implementing international energy projects, as well as the application of foreign best practices in the Russian Federation based on the example of the project “Market transformation programme on energy efficiency in GHG-intensive industries in Russia” were presented to the audi-



2 ence. The presentation was dedicated to opportunities opened up to industry by nature-like technologies and the work undertaken by the UNIDO Centre in cooperation with the National Research Centre “Kurchatov Institute” in this field.

Furthermore, Sergey Korotkov participated in the fourth meeting of the Council for Industrial Policy of the CIS Member States, held in the framework of INNOPROM. The meeting resulted in the adoption of a series of decisions, notably regarding the draft com-



19 September 2017 BRICS plus Belt and Road Business Forum was organized by UNIDO in the framework of the 2017 China International Fair for Investment and Trade that took place in Xiamen from 18 to 21 September 2017.

The UNIDO Forum on 19 September brought together decision-makers from BRICS and other countries, as well as representatives from the private sector and academia.

The Forum discussions focused on two important issues — BRICS E-commerce Public-Private Partnership and Chinese Enterprises’ Green Investment and Financing.

The Russian delegation to the event was comprised of Sergey Korotkov, UNIDO Centre Director; Igor Subow, Vice President for Logistics & International, National Association of Mail Order and Distance Selling Trade; and Valentin Okunev, Vice President, Managing Director, Small Business Department, PSC VTB 24. The delegates presented their respective projects in the field of e-commerce promotion,

mon conception of Member States on import substitution for energy equipment and measures for its implementation, on the use of natural gas as motor fuel for vehicles of the Commonwealth, as well as regarding the preparation of an agreement on electronic and electric waste management, draft common conception in the field of mechanical engineering for gas and oil sector, vocational retraining and further training for oil and gas sector among others.

as well as joint initiatives currently developed with the UNIDO Centre.

The UNIDO Forum was followed by a matchmaking event involving 40 Chinese companies and organizations, giving participants from the countries present opportunities for both group and one-on-one networking and knowledge sharing.





29 September 2017

Signing of the Joint Declaration with the National Research Centre “Kurchatov Institute”

The Joint Declaration with the National Research Centre “Kurchatov Institute” (Kurchatov Institute) was signed in Moscow within the framework of implementing the instruction of the President of the Russian Federation PR №1500 of 29 July 2016, referring to the UNIDO Centre as the partner of Kurchatov Institute in the deployment of nature-like technologies in the industry.

The document foresees the development and enhancement of cooperation between the UNIDO Centre and one of the largest scientific centres of Russian Federation regarding the contribution to the achievement of the United Nations Sustainable Development Goals, especially SDG9 “Build resilient

infrastructure, promote inclusive and sustainable industrialization, and foster innovation” through industrial deployment of nature-like technologies.

2

Within the partnership between the UNIDO Centre and the Kurchatov Institute a number of pilot projects are planned to be implemented in the field of deployment of convergent technologies in modern industries in the Russian Federation and abroad.



16 October 2017

Participation in the 19th World Festival of Youth and Students

The UNIDO Centre Director Sergey Korotkov took part in the panel discussion “Naturally-based technologies: new opportunities and new challenges” within the theme “The future of science and global education” organized as part of the 19th World Festival of Youth and Students in Sochi. Mikhail Kovalchuk, President of the National Research Centre “Kurchatov Institute”, moderated the discussion.

The participants discussed the need for new technological solutions taking into account the ecological imperative in the new reality of the Fourth Industrial Revolution. Convergent or naturally-based technologies could be such solutions. Based on the principles of integrated waste treatment and recycling, reduced

energy use and material intensity, naturally-based technologies only consume renewable resources, simultaneously allowing for creation of new man-made energy deposits and storehouses.



In his presentation, the UNIDO Centre Director described the plans to work in partnership with the Kurchatov Institute towards the introduction of naturally-based technologies in industry,

and the role of UNIDO in this process.

2 The creation of a new industry based on new convergent solutions is in line with the principles laid down in the

SDGs, aimed at utilizing the full potential of industry contribution to long-term and sustainable development.

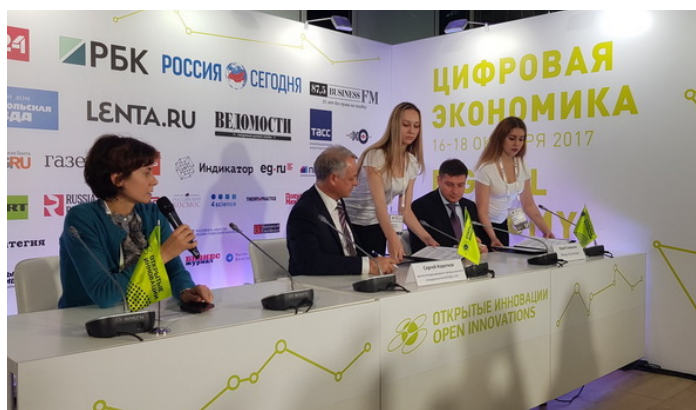


18 October 2017

Signing of the Joint Declaration with the Skolkovo Foundation

the Skolkovo Innovation Centre, which is an institution unique for Russia, through development and commercialization of new technologies. The signing ceremony took place during the “Open Innovations” Forum.

Skolkovo Foundation is a Russian foundation, whose objective is overseeing the creation and functioning of



The Joint Declaration foresees the development of cooperation within the activities of UNIDO in the following areas: support for scientific and innovative potential in the industry; commercialization of technologies and protection of intellectual property; support for commercial development of innovative enterprise; investments and technology promotion. Focus will be made on specific fields such as information technologies, nanotechnologies, bio and medical technologies, composite materials, design of complex technical systems.



9 November 2017

Workshop on “Participation of Russian business in project financing of international organizations”

Centre projects and cooperation opportunities for Russian business and UNIDO within the framework of joint future initiatives in the field of industrial development. In particular, he elaborated on new approaches to the identification of funding opportunities for technical assistance projects

The UNIDO Centre Director took part in the workshop organized by the All Russia Public Organization “Business Russia”. Sergey Korotkov presented to the audience current UNIDO

aimed at import substitution development and application of innovative solutions in industry in the Russian Federation.





15 November 2017

Joint conference “E-commerce new horizons in Russia and abroad” with VTB Group

The joint conference “E-commerce new horizons in Russia and abroad” allowed experts to discuss current trends of global e-commerce and export opportunities for Russian small enterprises through e-commerce.

Among the conference speakers were representatives of VTB Group, Russian Export Centre (REC), the Analytical Centre under the Government of the Russian Federation, and e-commerce companies.

At the end of the event more than 150 participants were offered individual consultations by representatives of VTB Group and REC on e-commerce, customs administration, logistics support, banking guarantees, external economic activity products and certification.

2



13 December 2017

Participation in the V All-Russian Congress of Environmental Protection and II International Exhibition-Forum “ECOTECH”

Among the event participants were representatives of professional ecological community and environmental organizations activists from all 85 regions of Russia. The main theme of the events was the summing up of outcomes of the Year of Ecology in Russia.

Resources project “Clean rivers of BRICS”. The project is aimed at increasing interaction between BRICS countries to control river water pollution and enhancing cooperation on a variety of issues related to water resources management and environmental protection.

The UNIDO Centre Director took part in the section entitled “Circular economy model: theory and practice” organized by the European-Russian Business Association. Sergey Korotkov presented the activities of UNIDO in the field of promotion of industrial development at the time of the Fourth Industrial Revolution and projects implemented by UNIDO in Russia, and particularly, the work carried out in cooperation with the Kurchatov Institute on the introduction of naturally-based technologies in industry.



Sergey Korotkov made a presentation within the section “Water – expanding borders of cooperation” organized by the Federal Agency on Water Resources. His presentation was dedicated to the joint UNIDO Centre and Ministry of Natural



19 December 2017

2 Meeting of the Steering Committee of the UNIDO-GEF project

The Steering Committee of the UNIDO/GEF project “Environmentally sound management and final disposal of PCBs at the Russian Railroad network and other PCBs owners” took place in the Center for Scientific and Technical Information of Russian Railroads JSC.

The meeting, chaired by the UNIDO Centre Director Sergey Korotkov, was attended by representatives of the Ministry of Natural Resources and Environment of the Russian Federation, the Federal Service for Supervision of Natural Resources, the Ministry

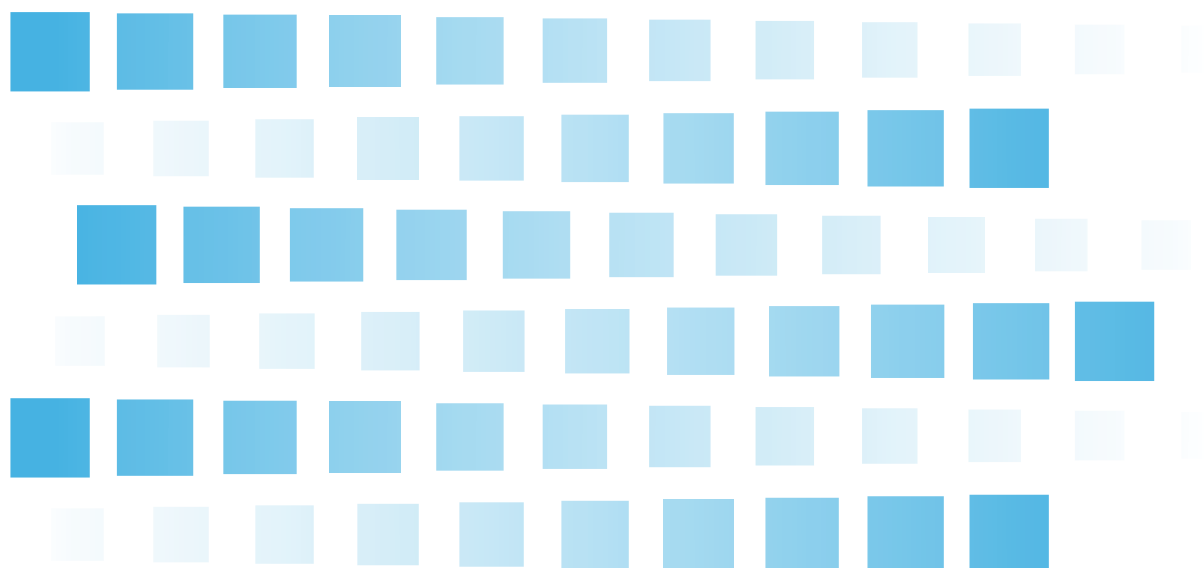
of Energy of the Russian Federation, as well as by other project counterparts.

Sergey Korotkov described the ongoing state of the project and presented main achievements within each project component. He specifically mentioned the Implementation Plan under the Stockholm Convention on Persistent Organic Pollutants, adoption of which gave a new boost to the project and took it to the next level.

During lively discussion at the end of the Steering Committee, further activities within the project were defined. The participants appreciated the efforts of the project’s counterparts in the implementation of the provisions of Stockholm Convention on POPs and expressed their hope for further successful continuation of the project.



Further information on each event can be found at: http://www.unido.ru/eng/news_en/



Projects in the Russian Federation

Market Transformation Programme on Energy Efficiency in GHG-Intensive Industries in the Russian Federation

Background

Implementation dates:

2010 – 2017

Project coordinator:

Maria E. Lazareva,

Lazareva.M.E@gmail.com

Website:

<http://unido.ecdl.su>

Objective – The project seeks to make a tangible impact on how industry manages energy, leading to sustainable and continually improving energy performance, substantial cost savings and GHG emission reductions. Special focus is on enhancing industry and service providers' technical capacity for implementing energy management systems (EnMS) in line with ISO 50001 and along with other selected best available technologies (BAT). Interventions at market level are complemented by close collaboration with the Russian Energy Agency and other federal as well as regional authorities to develop or support implementation of programmes contributing to the Russian Federation Energy Efficiency Programme till 2020.

Target group – Russian industrial enterprises.

The project aims to reduce GHG emissions of Russian industries by transforming the market for industrial energy efficiency. It builds on and reinforces the work carried out by the Russian Federation Government over the last 5 years to accelerate the pace of Russian transition towards a more energy efficient and productive economy. While remarkable progress has been made, substantial work is needed and numerous barriers remain to be addressed in order to achieve widespread improvement of energy efficiency in industry as well as in other sectors of the economy.

The project has been jointly developed and implemented by UNIDO and the European Bank for Reconstruction and Development (EBRD).

Project activities are grouped under four main components:

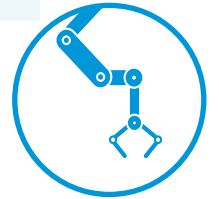
3 1. Enhancing knowledge assets

Under this component, activities are being carried out to promote industrial energy efficiency (IEE) knowledge dissemination, develop training programmes and material on energy management systems, system optimization (steam, pumps, compressed-air, fans and motors, process heat).



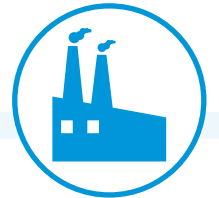
2. Capacity building for large industry

Component implemented by EBRD targeting knowledge and financial market barriers aiming to facilitate investment in EE for large companies.



3. Capacity building and Energy Management Systems in SMEs

Under this component, capacity building and technical assistance is being provided to Russian SMEs to implement energy management systems, energy system assessment and optimization projects. Technical assistance is also provided for preparing IEE investments plans for submission to financial institutions.



4. Policy support

Under this component, the project is working with federal and regional governments and other IEE relevant institutions to strengthen IEE policy-making and programme-implementation capacity and reinforce the existing policy, legal and regulatory framework for IEE. The goal of this component is to ensure the establishment of an environment supporting long-term sustainability of project outputs and outcomes.



UNIDO is responsible for the delivery of most training activities targeted to national IEE consultants and service providers (experts), enterprises/SMEs personnel and government officials. With respect to the first two target groups (experts and enterprise personnel), UNIDO delivers tailored training programmes to introduce and strengthen capacity for the development and implementation of energy management systems and energy systems (steam, compressed-air, pumps, etc.) optimization measures and projects in industrial enterprises.

Project partners

The main government bodies involved in energy efficiency policy-making process being involved in the project include:

- Ministry of Energy of the Russian Federation;
- Russian Energy Agency (REA);
- Ministry of Economic Development of the Russian Federation;
- Ministry of Natural Resources and Environment of the Russian Federation;
- Ministry of Industry and Trade of the Russian Federation;
- Ministry of Foreign Affairs of the Russian Federation.

Other public and private sector stakeholders involved:

- Analytical Centre under the Government of the Russian Federation;
- OPORA RUSSIA (NGO for SMEs);
- Russian Union of Industrialists and Entrepreneurs;
- Russian Association of Energy Service Companies;
- Regional/Oblast authorities and EE related institutions;
- Universities;
- Industrial enterprises;
- Energy efficiency consultants and service providers; and others.

Events

20 – 21 February 2017

Consultations were held on EnMS city programme at the Naberezhnye Chelny City Council session. The City Council holds an annual reporting session, during which the results of the previous year are reported and the outline for the ongoing year in terms of city development is discussed. Particularly, the EnMS city programme, for which the budget has already been allocated, was expected to be approved. As UNIDO expert, Boris Melnichuk was invited upon request from the city mayor Nail Magdeev to attend the consultations prior to the session and present the EnMS city programme.

20 – 28 February 2017

UNIDO experts carried out a Compressed Air System Optimization (CASO) assessment at ZavTex Tver.

26 February – 2 March 2017

Consultations were held on Astrakhan Sustainable City Programme. Initiated by the Astrakhan City Administration, the preliminary work on “Astrakhan – a sustainable city” project is currently underway. A working group meeting of potential stakeholders was scheduled in order to discuss the project concept and potential areas for cooperation. As UNIDO representative and EnMS project component coordinator, Boris Melnichuk was invited to attend the meeting and present the UNIDO project concept and UNIDO’s potential role in its implementation.

19 – 20 April 2017

3 The project team participated in a roundtable on EnMs in municipal sector at the Caspian Technology Forum. The event was dedicated to technologies and innovations and brought together representatives of academia, business, support institutions, executive authorities and international partners.

2 – 6 October 2017

UNIDO experts carried out a Steam System assessment at Tsaritsynsky dairy.

30 October –
3 November 2017

UNIDO experts carried out a Steam System assessment at Coca-Cola plant.

30 – 31 May 2017

UNIDO national expert Maxim Eliseev delivered a presentation at the Conference “Energy supply, energy saving and energy management in metallurgy and machine construction industries” in Chelyabinsk. As a speaker, he presented the UNIDO EnMS methodology and shared successful experiences of EnMS implementation at Russian enterprises with a goal of upscaling the project’s results and ensuring further promotion of EnMS.

12 October 2017

UNIDO experts participated in the Southern Dialogue Municipal Forum and presented the project on EnMS city programme implementation.

12 – 15 June 2017

UNIDO experts took part in the Energy Ministerial Forum in Astana. A representative of one of the project beneficiaries – housing and utilities management company “PKF Zhilkomservis” – was also invited. The director of the company presented the experience of EnMS implementation within the UNIDO project and the results achieved.

9 – 21 October 2017

Independent experts carried out a final evaluation of the project, under which energy data of all beneficiaries of the project was collected and analyzed, field missions to production sites of some companies were organized along with interviews with representatives of ministries and project partners, consultants involved in the process, and representatives of project beneficiaries.

Major achievements in 2017

Component 1. Enhancing knowledge assets (methodical, information and human resources support)

1. UNIDO carried out a number of activities to disseminate information about the project, EnMS and system optimization, and its results. Printed and electronic quality training materials produced during the previous years continued to be disseminated. A PR campaign was carried out (videos on project activities were recorded and distributed among REA experts).
2. Members of the project team and engaged experts participated in international and national events related to energy issues.
3. One of the most important results of the project is bringing live UNIDO project portal (temporary domain: unido.ecdl.su) targeted at providing operational and socially significant information and guidance in the field of energy management and energy efficiency in industry as well as other economy sectors to a wide range of users: participants of the project, energy experts, industrial enterprises, public authorities and other stakeholders. The project team maintained operation of the portal created by UNIDO, providing most up to date information on EnMS implementation, system optimization and energy efficiency as a whole.

Component 3. Energy management system capacity building and energy efficiency improvement in SMEs

3

1. The Nab. Chelny EnMS City Programme and the Mamadysh EnMS Industry Programme for 15 municipal and budgetary organizations have been successfully completed, resulting in additional energy savings and further dissemination of the UNIDO EnMS methodology within public sector enterprises. A total of 4 EnMS trainings were conducted in 2017, both for Mamdysh and Nab. Chelny groups of companies. Highly positive outcomes of Nab. Chelny City Programme encouraged the Astrakhan City Administration to work towards EnMS implementation based on UNIDO methodology in its municipal organizations, thus contributing to overall sustainability of the project's results.
2. A total of 27 case studies on EnMS implementation at the industrial enterprises beneficiaries of the project were developed and published.



3. Actions were undertaken to ensure project upscale, replication and sustainability. Work on the development of a project concept upon request of the Ministry of Economic Development of the Russian Federation and its subsequent approval by relevant stakeholders continued to be carried out. The project concept “Creation of international EnMS and EE Centre of Competence for CIS countries” aims at replicating the acquired EnMS implementation experience in CIS countries thus, positively contributing to energy stability of the region, strengthening partially declined regional networks of industrial cooperation, and lowering the load of local generation and distribution objects. One of the important project highlights in terms of sustainability and upscale was the decision of Astrakhan City Administration to launch its Sustainable City programme, which includes Sustainable City, Waste to Energy and EnMS components. The SC project is envisaged to be sponsored by the city budget and the sources attracted through the Regional Development Fund.

Component 4. Government capacity building and support programme

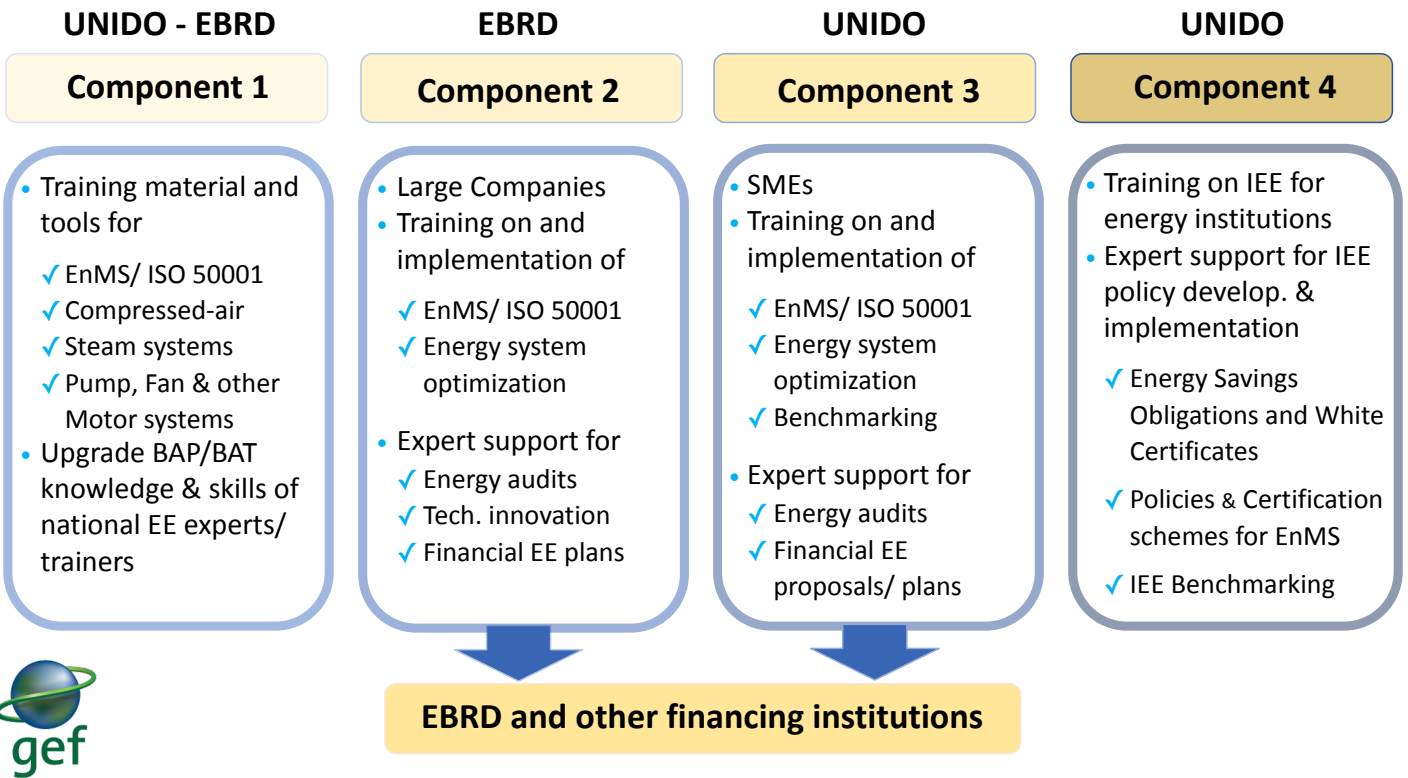
1. The online course “How to calculate energy resource economy at an enterprise?” has been developed by REA based on UNIDO methodology.
2. An overview of the current legislation for certification of industrial equipment has been prepared.
3. Project results have been reported to REA and other policy makers in the field.

Final project results

3



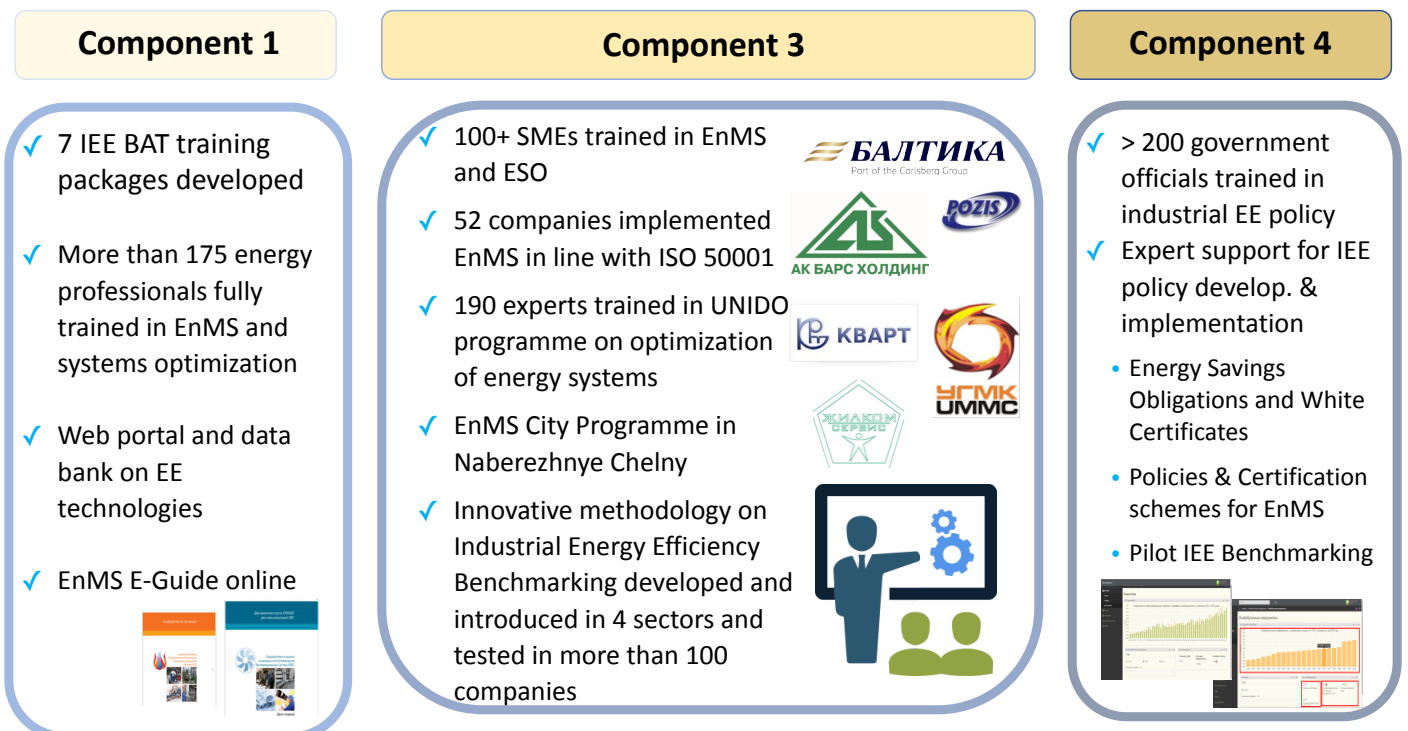
Russian Federation – IEE Project Structure



1/4



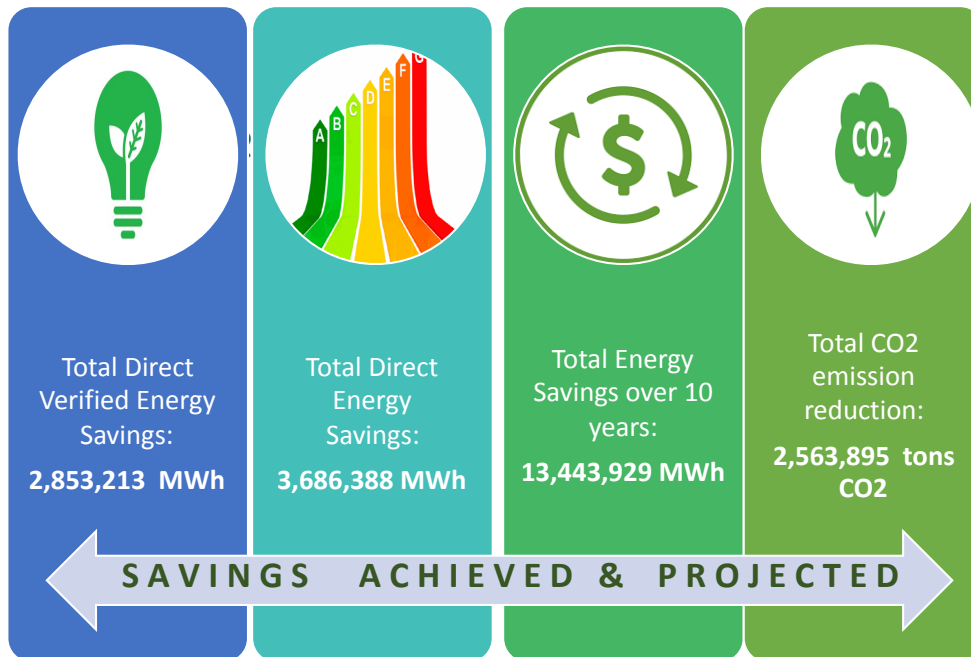
Russian Federation – IEE Project Results



2/4



Russian Federation – IEE Project Results



Russian Federation – IEE Project Results

Piloting of 1st Russian EnMS City Programme

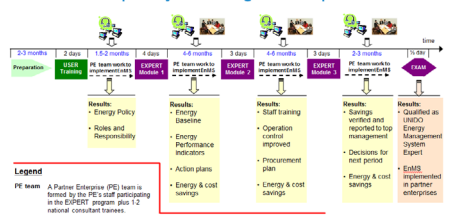
Objectives

- ✓ Extend and scale-up results of EnMS industrial programme → create market
- ✓ EE in municipal enterprises and industry
- ✓ Energy, Costs and GHG savings plus multiple socio-economic benefits
- ✓ Systematic approach and organizational improvements for energy management in support of Sustainable City and Development Programmes/Goals

Modalities and focus

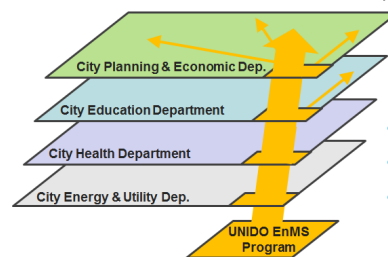
- ✓ Training and competencies development
- ✓ Partnerships for piloting and results
- ✓ Initial focus on people, processes and no- and low-cost energy savings

EnMS Capacity Building and Implementation



Naberezhnye Chelny

Track 1



- City Executive Committee
- 11 municipal dept./comp.
- 2 industrial companies

Track 2

Further actions under the project

3 Final closing event of the project is scheduled for April 2018 along with the preparation and dissemination of summary information material.

Media coverage

The project activities were covered by the following media:

1. Official website of Astrakhan City Administration, 01.03.2017, article “The Administration of Astrakhan discussed world projects on energy management” // <http://www.astrgorod.ru/news/v-administracii-astrahani-obsudili-mirovye-proekty-po-energomenedzhmentu/>
2. A series of press releases of the Union of Russian Brewers, 01.06.2017, article “SPIEF hosted a presentation of a unique study on best practices in the field of sustainable development” // http://www.beerunion.ru/press_office/news/22336/
3. Online edition “Profibeer”, 21.07.2017, article “Baltika has confirmed the compliance of its management system with international standards” // <https://profibeer.ru/beer/27893/>
4. Magazine “Resource Efficiency in the Republic of Tatarstan”, special edition 2017, article “Energy management systems according to the methodology of UNIDO – results achieved at Naberezhnye Chelny enterprises” // <https://goo.gl/nqVw8f>

Environmentally Sound Management and Final Disposal of PCBs at the Russian Railroad Network and other PCB Owners

Background

Implementation dates:

2014 – 2018

Project manager:

Sergey A. Korotkov,
S.KOROTKOV@unido.org

Project coordinator:

Mikhail P. Nikiforov,
minikif@gmail.com

Website:

<http://www.stoppcb.ru>

Objective – creation of the State PCBs management system in the Russian Federation, PCBs identification system in the energy equipment of industrial enterprises, safe maintenance of PCB contaminated energy equipment and PCBs environmentally sound disposal in accordance with Russian and international regulations.

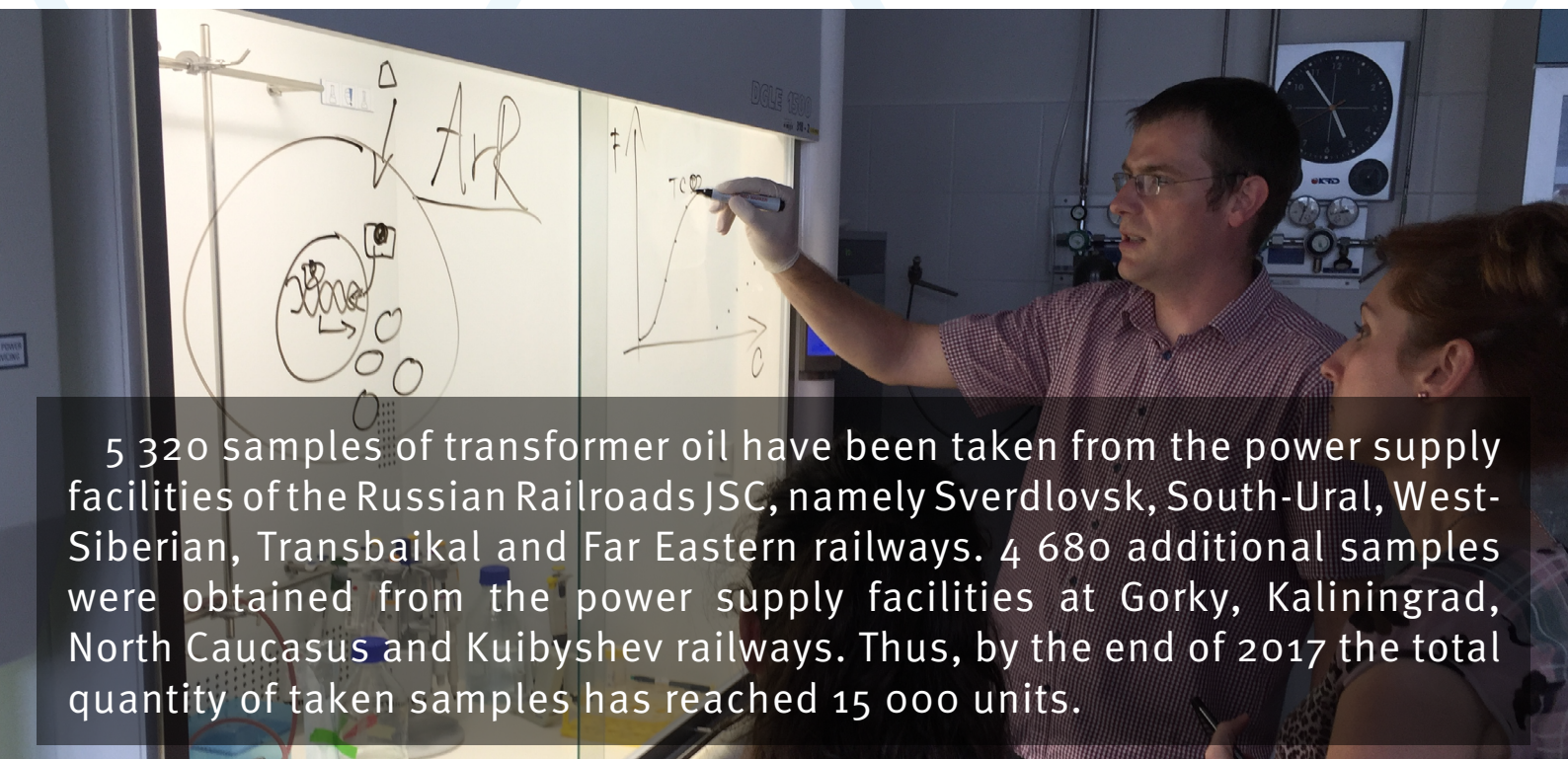
The following activities are foreseen within the project:

- Institutional, regulatory and workforce capacity building for implementation and performance of PCBs environmentally sound management system;
- Country-wide inventory of PCB-contaminated equipment and wastes;
- Environmentally sound management and disposal of PCB-contaminated equipment and wastes.

During the reporting period the UNIDO Centre has significantly contributed to the drafting of the Implementation Plan under the Stockholm Convention on Persistent Organic Pollutants (POPs) adopted by the Russian Minister of Natural Resources and Environment by Order №529 dated 3 October 2017. UNIDO project is included in the Plan as one of the main activities under Objective №3 “Treatment and disposal of accumulated unused and prohibited pesticides, industrial waste and equipment, containing POPs”.

As a result of cooperation with the Ministry of Economic Development regarding PCBs reference standard import, the Draft of Decision of the Board of the Eurasian Economic Commission “On making amendments to Decision of the Board of the Eurasian Economic Commission dated 21 April 2015 №30 “On non-tariff regulation measures” was prepared. At the end of the reporting period the Draft Decision was awaiting approval of the Member States of the Customs Union.

3 In 2017, a total of seven research works concerning different aspects of environmentally sound PCB management were developed. An analysis of the existing PCBs management system in Russia was carried out and ways of its improvement based on the principles of project-targeted management were formulated. The technological and logistic scheme for decommissioning and treatment of capacitors contaminated with PCB-containing oils and PCB-containing oils was developed. The guidance for assessing the health risks of PCBs was prepared. The scientific-research work “PCB Worker Safety Guidelines for the workers at the enterprises-owners of PCB-containing equipment and wastes” was presented. All these works might serve as guidelines for PCB owners when working with oil-extended equipment. That has become especially important due to the adoption of the Implementation Plan under the Stockholm Convention on POPs.




5 320 samples of transformer oil have been taken from the power supply facilities of the Russian Railroads JSC, namely Sverdlovsk, South-Ural, West-Siberian, Transbaikal and Far Eastern railways. 4 680 additional samples were obtained from the power supply facilities at Gorky, Kaliningrad, North Caucasus and Kuibyshev railways. Thus, by the end of 2017 the total quantity of taken samples has reached 15 000 units.

The project team is moving forward with the inventory of electrical equipment of the Russian Railroads JSC, started in 2015. The project laboratories are being prepared for the samples analysis. During the reporting period experts' efforts were concentrated on the amendments to the current legislation of the Russian Federation and the Customs Union concerning PCBs reference standards ban in order to supply the required reagents to the laboratories.

Within the framework of the technological component of the project, procurement of a PCB decontamination unit including a unit on production of dechlorination reagents has taken place. As of the end of the reporting period UNIDO has been expecting the Contractor to fulfill all necessary requirements for the conclusion of the Contract.

From December 2016 to March 2017, the mid-term review of the project was held. Independent consultants assessed the overall implementation rate of the project including all its components as satisfactory.



Due to planned purchase of a high-oxidation complex for disposal of high-contaminated PCB, UNIDO experts will visit leading Australian companies that have an important experience in the matter.

The project team is expecting to acquire best practices for PCB disposal in compliance with the requirements of environmental security, personnel and public safety, to study methods and techniques, specifications for the operation of the disposal system including assembly, installation, logistic, dismantlement, transportation, cleaning, and to conduct a comparative analysis of the legislative systems in Australia and Russia.

Project partners

- Ministry of Natural Resources and Environment of the Russian Federation;
- Russian Railroads JSC;
- “Vodokanal of St. Petersburg” SUE;
- Gubkin Russian State University of Oil and Gas (National Research University).

Events

24 April – 5 May 2017

13th meeting of the Conference of the Parties of the Basel Convention, 8th meeting of the Conference of the Parties of the Rotterdam Convention and 8th meeting of the Conference of the Parties of the Stockholm Convention

Within the framework of the global event of the three Conventions in Geneva, national consultant Ivan Seregin took part in discussions concerning the implementation of Stockholm Convention on POPs provisions. The effectiveness evaluation of the Stockholm Convention was discussed. The overall outcome of the effectiveness evaluation was that the Convention provides an effective and dynamic framework to regulate POPs throughout their lifecycle, addressing the production, use, import, export, releases, and disposal of these chemicals worldwide.

26 April 2017

Presentation of the independent mid-term review of the project “Environmentally sound management and final disposal of PCBs at the Russian Railroad network and other PCBs owners”

UNIDO national consultant Stanislav Pokrovskiy and UNIDO international consultant Yury Akhvlediani presented the results of the independent mid-term review of the project. The project has been evaluated according to several key indicators, namely: project design and readiness, efficiency, relevance, monitoring and evaluation system, sustainability, project management and coordination.

The state of project implementation at the period of review has been measured according to the state of implementation of each component: component 1 – 58%, component 2 – 63%, component 3 – 50%, component 4 – 44%. The overall completion of the project is 54%, the completion of budget (GEF funds) is estimated as 49,9%. The independent consultants mentioned that the overall implementation rate including all its components is assessed as satisfactory. The risks that could hinder the full implementation of the project were identified, including delays in approving the necessary regulatory and legal documents by the Government and the decision of the Eurasian Economic Union, which prohibits import of PCB standards necessary for calibration of equipment.

25 – 26 May 2017

VIII Nevsky International Ecological Congress “Environmental education – a clean country”

The aim of the event that took place in St. Petersburg, is the promotion of international environmental security framework. Project coordinator Mikhail Nikiforov participated in the roundtable discussion “Improvement of complex waste treatment system: open dialogue of businesses and government”. The moderators of this discussion were Presidium member of the General Council of All-Russian Public Organization “Business Russia” and Deputy Director of the Department of State Policy and Regulations in Environmental Control of the Ministry of Natural Resources and Environment of the Russian Federation. He presented the UNIDO/GEF project “Environmentally sound management and final disposal of PCBs at the Russian Railroad network and other PCBs owners”, described its general state and main difficulties that UNIDO team faced during its implementation.

26 – 30 June 2017

13th Summer School on Toxic Compounds in the Environment

The Summer School organized by the Research Centre for Toxic Compounds in the Environment (RECETOX) was held in Brno, Czech Republic. National consultant Daria Razorenova participated in the training and presented the project “Environmentally sound management and final disposal of PCBs at the Russian Railroad network and other PCBs owners”. International experts of RECETOX evaluated the project and rendered their assistance in development of a roadmap concerning the minimization of risks.

10 – 13 July 2017

International Industrial Trade Fair INNOPROM 2017

The UNIDO Centre Director Sergey Korotkov took part in the Council for Industrial Policy of the CIS Member States taking place at INNOPROM 2017. UNIDO Centre activities were presented, particularly the correlation with environmental safety in respect of PCBs management.

19 July 2017

Working meeting with the Contractor on supply of mobile non-combustion decontamination technology for the treatment of transformer oil from PCBs

The following topics were discussed during the meeting:

1. Confirmation that the technology, when treating PCB-contaminated mineral oil, will produce oil that can be regenerated for use in electrical transformers, wherever economically reasonable.
2. Cooperation arrangements between UNIDO and “NPO Dekanter” LLC concerning the supply of decontamination technology.
3. Report “Design of the equipment” submitted to UNIDO in two months after signing the Contract.
4. Requirements for site preparation and the materials required for equipment testing before the Certificate of Acceptance signing.

11 October 2017

Working meeting with the Contractor on supply of mobile non-combustion decontamination technology for the treatment of transformer oil from PCBs

The following topics were discussed during the meeting:

1. Requirements for site preparation and the materials required for equipment testing before the Certificate of Acceptance signing (required quantity of consumables, oil etc.).
2. Requirements for the quantity of personnel and their qualification.
3. Deliverables and timeframe of shipping the equipment to the site and confirmation of unit operation.
4. Inspection visit of UNIDO experts in cooperation with Russian Railroads JSC specialists to the Contractor's site to examine the equipment ready for tests.
5. The positive evaluation document of the Federal Service for Supervision of Natural Resources.

17 October 2017

Extended meeting of Russian Railroads JSC on environmental issues

National consultants Valeriy Pershin and Ekaterina Demicheva took part in the extended meeting of Russian Railroads JSC on environmental issues at the Scientific Production Center for Environmental Protection — a branch of Russian Railroads JSC under the supervision of Valentin Gapanovich, Senior Adviser to the President of Russian Railroads JSC on environmental issues. The meeting was also attended by the head of the Northern railway Valeriy Tanaev and the head of the Federal Service for Supervision in the field of Nature Management in the Yaroslavl region Vladimir Shalaev. The meeting covered operations of the hazardous waste disposal facility, officially opened on 28 July 2015, in the presence of the Managing Director of UNIDO Philippe Sholtes. The UNIDO/GEF project implementation was also highlighted. Regarding the UNIDO/GEF project issues of the supply of a mobile PCB-contaminated transformer oil purification plant, the prospects of using a plasma hazardous waste neutralization plant (purchased by UNIDO), as well as the implementation of the joint UNIDO/Russian Railroads JSC/NEFCO project for cleaning Northern and Arctic territories of the Russian Federation from PCB-containing wastes were covered.

31 October 2017

Inspection visit of UNIDO experts in cooperation with Russian Railroads JSC specialists to the Contractor's site to examine the equipment ready for tests

The UNIDO project team in cooperation with Russian Railroads JSC specialists visited manufacturer's site of "NPO Dekanter" LLC in order to examine the equipment that was ready for tests. The examination took place at manufacturer's site of "NPO Dekanter" LLC in Sasovo (Ryazan oblast).

UNIDO and Russian Railroads JSC specialists attended the presentation describing the equipment and its main parts, as well as its allocation concept. The real assembly location was also presented. The Contractor "NPO Dekanter" LLC demonstrated decontamination technology for the treatment of transformer oil from PCBs in non-operating conditions (with sectional turn-on of some unit blocks). The Contractor also demonstrated the programme that allows controlling the unit by tablet.

As a result of the inspection, it was found that the unit was manufactured and assembled, however it was not fully ready for tests and some parts needed to be finalized.

6 December 2017

Visit to the Manihino Pokrovsko-Streshnevskaya power supply line of the Moscow Directorate for Energy Supply of Transenergo, a branch of Russian Railroads JSC

UNIDO national consultants in cooperation with the Contractor visited the operational site of the Manihino Pokrovsko-Streshnevskaya power supply line of the Moscow Directorate for Energy Supply of Transenergo, a branch of Russian Railroads JSC. The installation of the PCB decontamination unit will be delivered to this traction substation. Proof performance test of the unit is scheduled for January 2018.

19 December 2017

Meeting of the Steering Committee of the project

The Steering Committee, chaired by the Director of UNIDO Centre, was attended by representatives of the Ministry of Natural Resources and Environment of the Russian Federation, the Federal Service for Supervision of Natural Resources, the Ministry of Energy of the Russian Federation, the N.N. Vorozhtsov Novosibirsk Institute of Organic Chemistry of Siberian Branch of Russian Academy of Sciences, which was appointed National Coordination Centre for the Stockholm Convention on POPs, as well as the counterparts of the project – representatives of Russian Railroads JSC, Gubkin Russian State Oil and Gas University, FSBI “Russian Energy Agency” and SUE “Vodokanal of St. Petersburg”.

The on-going state of the project and the main achievements within each project component were presented.

During lively discussion at the end of the Steering Committee were defined further activities within the project. The participants appreciated the efforts of the project’s counterparts in the implementation of the provisions of Stockholm Convention on POPs and expressed their hope for further successful continuation of the project.

28 December 2017

Inter-agency working meeting on the implementation of Russian Federation obligations under the Stockholm Convention on POPs

The Director of UNIDO Centre Sergey Korotkov and national expert Ekaterina Demicheva took part in the meeting. At the meeting, the issue of establishment of a working group for the execution of the Implementation Plan of the Russian Federation obligations under the Stockholm Convention on POPs was discussed. It was decided that the meeting’s participants and namely representatives of executive bodies of the Russian Academy of Sciences and Russian Railroads JSC, would develop and present to the Ministry of Natural Resources and Environment their proposals for nominations of members of the working group. Also, possible amendments and additions to the Implementation Plan were debated. The Federal Agency for Scientific Organizations, the Federal Environmental, Industrial and Nuclear Supervision Service of Russia (Rostekhnadzor) and the Ministry of Natural Resources and Environment are closely involved in the process.

Major achievements in 2017

3 Component 1.1. Strengthening of the policy and regulatory framework

1. The Order of the Minister of Natural Resources and Environment of the Russian Federation №529 dated 3 October 2017 approved the Russian Federation's Implementation Plan to meet the obligations under the Stockholm Convention on POPs. One of the main activities of the Plan aiming to implement the Objective 3 (Treatment/disposal of accumulated unusable and prohibited pesticides, industrial wastes and equipment containing POPs) is meant to be the UNIDO project.
2. When analyzing Russian and the Customs Union countries' legislative framework, significant shortcomings in the regulation of the export and import of analytical PCB standards on the territory of the Eurasian Economic Union have been brought to light, namely the ban on the import of PCB-containing standards for chemical analysis purposes, while certified Russian analogues are absent. The project consultants conducted numerous negotiations with interested agencies (Ministry of Natural Resources and Environment of the Russian Federation, Ministry of Industry and Trade of the Russian Federation, Federal Customs Service, Eurasian Economic Commission, Ministry of Economic Development of the Russian Federation) on amending the relevant regulatory legal documents regarding the exclusion of PCB-containing analytical standards from this prohibition. Based on the results of the negotiations and consultations, the Draft Decision of the Board of the Eurasian Economic Commission "On Amendments to the Decision of the Board of the Eurasian Economic Commission dated 21 April 2015 №30 "On non-tariff regulation measures" was prepared, providing the exclusion of PCBs intended for laboratory-scale research from the ban list. At the end of the reporting period the Draft Decision was undergoing approval procedures with the Member States of the Eurasian Economic Union.

Component 1.2. Training on the new regulations for the staff of the federal and regional government agencies, customs authorities, NGOs and PCB owners

1. The drafts of regulatory legal acts regulating the treatment of PCBs, developed by a working group under the Federal Service for Supervision of Natural Resources were coordinated with the interested Ministries and departments and submitted for approval to the competent authorities.
2. As part of efforts to raise public awareness, liaisons have been established with public organizations and scientific organizations working with POPs, including PCB-containing, such as N.N. Vorozhtsov Novosibirsk Institute of Organic Chemistry of Siberian Branch of the Russian Academy of Sciences (National Coordination Centre for the Stockholm Convention on POPs), ANO International Center for Business Support (Designated Focal Point for the Basel Convention in the Russian Federation), ANO "Eco-Accord", etc. as well as with foreign organizations, especially the National Academy of Sciences of Belarus

and RECETOX. The cooperation includes consultations on the implementation of the Stockholm Convention on POPs in the Russian Federation, discussion of regulatory and legal acts related to the management of PCBs, sharing experience on the PCB inventory and disposal.

Component 1.3. Introduction of ESM measures for safe management/disposal of PCB wastes and occupational health

1. Based on the inventory results, activities continued to be carried out to identify the main sources of POPs unintentional production.
2. PCB Worker Safety Guidelines for the workers at the enterprises-owners of PCB-containing equipment and wastes were developed.
3. A number of Guidelines on ecologically sound management related to the safe disposal of PCB-containing wastes and labor protection were developed:
 - guidance for assessing the health risks of PCBs;
 - an analysis of the existing PCBs management system in Russia was carried out and ways of its improvement on the principles of project-targeted management were formulated;
 - scientific and methodological approaches to organize financing of the projects on the disposal of PCB-containing equipment in parallel with development of proposals for project's financial schemes and resources as well as mechanisms of State support have been formed.

Component 2.1. Adoption of methods for PCBs analysis and accreditation of 3-4 laboratories for PCB analysis

1. Development of bidding documentation for the supply of two mobile laboratories for the PCBs analysis in transformer oils. The laboratories will be located in Moscow and St. Petersburg and equipped with a set of equipment, materials and reagents that will allow screening and gas chromatographic analysis of transformer oils and environmental components potentially contaminated with PCBs.
2. Development and testing of methods for express-analysis of PCBs in electrical insulating liquids, as well as preparation of documents for patenting the methodology are being carried out.

Component 2.2. Undertaking the extended PCB inventory

1. The second stage of sampling of transformer oils at the power supply facilities of Russian Railroads JSC was successfully completed. 5 320 samples of transformer oil from transformers of Sverdlovsk, South Ural, West Siberian, Trans-Baikal and Far Eastern railways were taken. During the third stage of sampling process 4 680 more samples of transformer oil were obtained from the power supply facilities at Gorky, Kaliningrad, North Caucasus and Kuibyshev railways.

2. Samples of transformer oil (15 000 units) taken during the first, second and third stages of the inventory are currently stored in the warehouse of the contractor until they are transferred to the laboratory for analysis.
3. Experts of the Department of labor protection, industrial safety and environmental control carried out a documentary inventory of PCB-filled condensers owned by Russian Railroads JSC. According to the inventory data, up to 150 000 PCB-filled capacitors are on the company's balance sheet. Specialists of the Russian Railroads JSC are developing procedures for such equipment to be properly handled and decommissioned.
4. An additional inventory of oil-filled equipment was made with a breakdown by manufacturing plants and years by Russian Railroads JSC specialists in cooperation with UNIDO team, and a list of equipment to be subjected to inventory was drawn up. At the end of the reporting period, the addresses for the next inventory stage were being identified (additional 35 000 samples).

Component 2.3. PCBs inventory labeling and database established

- A database has been established to monitor the implementation of the provisions of the Stockholm Convention on POPs aiming at taking inventory of manufactures, equipment, materials using or containing PCBs as well as PCB-containing wastes in the Russian Federation. The interface and attribute structure (content) of the system has been coordinated with the Federal Service for Supervision of Natural Resources as the end user of the software.

Component 3.1. Establishing the System for Environmentally Safe Packaging, Storage, and Transportation of PCBs

- A technological and logistic scheme for decommissioning and treatment of capacitors contaminated with PCB-containing oils and PCB-containing oils has been developed. The developed scheme will serve as a basis for implementing practical actions for handling PCB-contaminated capacitors and materials.

Component 3.2. Selection of Environmentally Safe Disposal Technology

1. The PCB-decontamination unit for oils with PCBs mass concentration of less than 5 000 mg / kg, and a reagent production unit were manufactured and assembled by the "NPO Dekanter" LLC. During the visit of the UNIDO working group and specialists of the Russian Railroads JSC to the manufacturer's site (village Sasovo, Ryazan region) it became obvious that they were putting finishing touches on some parts of the unit before the test starting. The tests are scheduled for February 2018.
2. The conclusion of the contract for the supply of a high-temperature oxidation unit for highly contaminated PCB-containing oils with PCB concentration of more than 5 000 mg / kg is under way.

Component 3.3. Environmentally Safe Disposal of 3 800 tons of PCBs

- Based on the results of the laboratory analysis of the selected transformer oil samples, specialists of Russian Railroads JSC together with UNIDO experts will draw up a schedule for cleaning the PCB-containing transformers with a decontamination unit.

Further actions under the project

Within the framework of project implementation for 2018-2019 the following activities are planned:

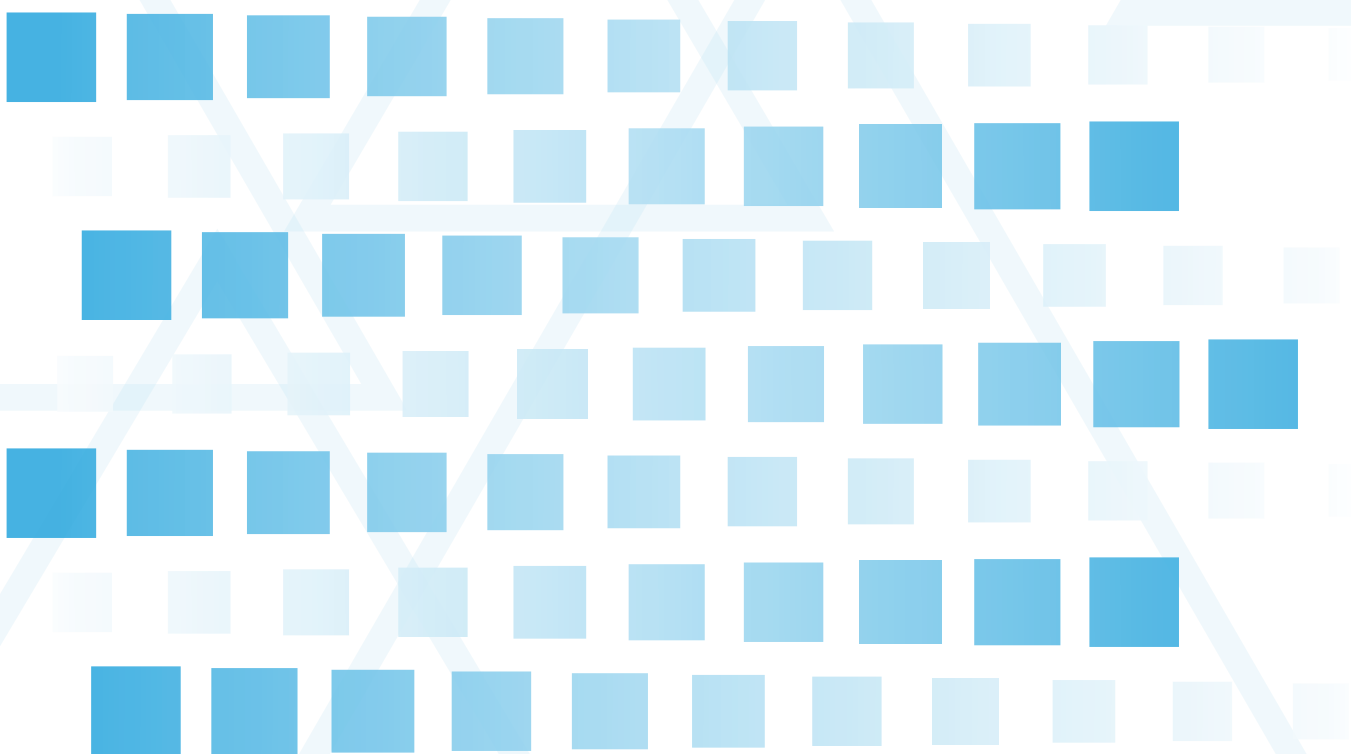
- making amendments to the list of occupational risks when working with power equipment in view of the presence of PCBs in electrical insulating liquids;
- approval and carrying into effect of standard-setting instruments regulating the management of PCB-containing equipment, materials and wastes;
- drawing up a list of transformer equipment of Russian Railroads JSC, subjected to an inventory for presence of PCBs;
- taking inventory of 35 000 transformers owned by Russian Railroads JSC for PCBs presence;
- analysis of transformer oils for PCBs presence;
- purchase and putting into operation mobile laboratories to indicate the PCBs presence in transformer oils and other materials;
- putting into operation the database on control of the implementation of provisions of the Stockholm Convention on POPs in the Russian Federation aiming at conducting the inventory of manufactures, equipment, materials using or containing PCBs, as well as PCB-containing wastes;
- setting up a system of labeling transformer equipment, based on PCBs presence in electrical insulating liquids;
- decontamination and final disposal of 3 800 tons of PCB-containing electrical insulating liquids.

Media coverage

The project activities were covered by the following media:

1. Business Guide “Ecology”. Appendix No. 12 to the Kommersant newspaper, 31.03.2017, article “Find and neutralize” // <https://www.kommersant.ru/doc/3249243>
2. UNIDO Centre official website, 28.04.2017, article “Presentation of the independent mid-term review of the UNIDO Project” // http://www.unido.ru/news/obzor_proekta_unido/

- 3. UNIDO Centre official website, 17.11.2017, article “The Russian Federation’s Implementation Plan for the Stockholm Convention on POPs has been approved” // http://www.unido.ru/news/plan_rf_stokgolm_konvencii_o_soz/
- 4. UNIDO Centre official website, 23.05.2017, article “VIII Nevsky International Ecological Congress” // http://www.unido.ru/news/viii_nevskii_kongress/
- 5. UNIDO Center official website, 30.10.2017, article “UNIDO consultants participated in the expanded meeting of Russian Railways on environmental issues” // http://www.unido.ru/news/konsultanti_unido_soveshhanie_rzhd/



Background

Implementation dates:

2015 – 2020

Project coordinator:

Viktor N. Kulkov,

prominclub-info@yandex.ru

Website:

**[http://www.unido.ru/programmes/
projects_unido/prom_innovac_klub/](http://www.unido.ru/programmes/projects_unido/prom_innovac_klub/)**

Objective – promotion of scientific and technological development of industrial sectors for the advancement of the real industrial sector of sustainable economy.

Project tasks – development and implementation of complex industrial projects at all stages of the innovative cycle, from research and development to technologies and their practical use in production, including the establishment of mechanisms for management of projects.

Project partners

- Technological development of agricultural production in Russia 2016-2020:
 - Russian Academy of Sciences (RAS);
 - Department of Agricultural Sciences of RAS;
 - Siberian Branch for Agricultural Science of RAS;
 - Moscow State University (MSU) Science Park;
 - INION;
 - Shanghai Cooperation Organization (SCO) Business Club;
 - “PROEKTPI SHESTROY” JSC, Moscow;
 - Investment Development Agency of the Government of Novosibirsk region;
 - Pushchino Scientific Center of RAS;
 - Scientific Research Institute of Meat Industry of RAS;
 - Research Institute of Baking Industry.
- Development of textile industry in Russia 2016-2020:
 - SOUZSLEGPROM;
 - “BKLM-Activ” JSC (Large Kostroma Linen Factory);
 - “Cotton factory “Shuiskys Sittsy” CJSC;
 - “Moscow Silk” CJSC;
 - “Innovation Centre of Textile and Light Industry” JSC;
 - Investment Development Agency of the Government of Novosibirsk region;
 - MSU Science Park.

- Development of foundry production in Russia 2016-2020:
 - Ministry of Economic Development of the Russian Federation;
 - Committee on Foundry of the Union of Machine Builders of Russia;
 - Committee on Innovations in Metallurgy and Foundry Industry of Tula Chamber of Commerce and Industry (CCI);
 - Investment Development Agency of the Government of Novosibirsk region;
 - Magnitogorsk State Technical University;
 - Engineering company “LITAFORM”;
 - Russian Association of Casters;
 - Leningrad Association of Foundry;
 - Group of Companies “Reltek”, Ekaterinburg;
 - “SIBELECTROTERM” JSC, Novosibirsk;
 - “SIBLITMASH” JSC, Novosibirsk;
 - Coordinating Committee AFROCOM;
 - Foundry Association of BRICS;
 - SCO Business Club;
 - “METALLURGMASH Engineers”, Moscow;
 - NRI TSVETMET.

Events

30 March 2017

Presentation of the Comprehensive Sectoral Programme for 2017-2025.

17 July 2017

Presentation of the Roadmap for 2018-2020 for the Comprehensive Sectoral Programme implementation.

25 – 27 September 2017

Presentation of the Comprehensive Sectoral Programme to the Ministry of Economic Development of the Russian Federation.

13 October 2017

Participation in the International Scientific and Practical Conference of the Ministry of Economic Development and the Russian Foreign Trade Academy “SCO – a promising platform for a broad mutually beneficial cooperation and integration in Eurasia”, Moscow, Russia.

22 November 2017

Participation in the VI International Business Forum “Moscow SCO Business Dialogue”, Moscow, Russia.

23 – 25 November 2017

Participation in the All-Russian Conference of the Ministry of Economic Development “Development of an infrastructure system for support of SMEs”, Chelyabinsk, Russia.

29 November 2017

Participation in the International Scientific and Practical Conference of the Public Chamber of the Russian Federation and Russian Academy of Sciences “Analytics of development, security and cooperation: Great Eurasia - 2030”, Moscow, Russia.

30 November – 1 December 2017

Participation in the International Conference of the Ministry of Economic Development “Foreign economic activity as a factor of effective development of SMEs in the Russian Federation regions”, Rostov-on-Don, Russia.

Major achievements in 2017

- In order to consolidate the efforts of the industrial and scientific-production enterprises in support of the UNIDO project, the Industrial Innovation Club (IIC), formed on a voluntary basis at the UNIDO Centre from among the representatives of Russian companies, has continued to operate in 2017 focusing on priority areas of industrial development and engaging in practical activities in BRICS countries.
- Work on the BRICS Roadmap until 2020 was pursued for the Ministry of Economic Development of the Russian Federation.
- Cooperation within the BRICS Foundry Association has continued throughout the reporting period.
- One of the major achievements of the reporting period is the development of the Comprehensive Sectoral Programme for 2017-2020, with possible extension until 2025, by the UNIDO Centre and IIC in close cooperation with the SCO Business Club and MSU Science Park. The Programme is based on integrated sectoral projects developed jointly with Russian industrial and scientific-industrial enterprises and organizations:
 1. “Development of foundry production in Russia 2016-2020”. Further information can be found at: http://www.unido.ru/news/prog_razvitija_lit_proizvodstva/
 2. “Technological development of agricultural production of Russia 2016-2020”. Further information can be found at: http://www.unido.ru/news/proekt_razvitija_agroproma/
 3. “Development of textile industry in Russia 2016-2020”. Further information can be found at: http://www.unido.ru/news/proekt_otraslevogo_razvitija/



The Comprehensive Programme contains 36 project proposals in 5 priority industrial sectors located in 12 regions of the Russian Federation, consolidated in a Roadmap.

The Programme is in line with goals and objectives defined in the Scientific and Technological Development Strategy of the Russian Federation and the Strategy for Development of Small and Medium Entrepreneurship in the Russian Federation till 2030.

The integrated projects have been approved by the Ministry of Economic Development and Russian Academy of Sciences. During the reporting period, potential partners for project implementation were identified.

At the initial stage, the Programme is designed to support SMEs working in the following sectors: small-scale metallurgy and foundry industry, small-scale energy industry and energy production from renewable sources, agricultural industry, textile industry and affordable housing technologies. Some of the sectors are considered to be at risk, since cutbacks in production and in the number of local enterprises and technologies have been noted (specifically the foundry and textile industries).

The Programme's main objective is to provide guidance to SMEs on the consolidation of scientific, industrial and financial resources. The document foresees the development of innovative infrastructure instruments for an effective formulation and implementation of project proposals, including support in technology deployment, specialists training, funding and co-funding applications filing and submission.

Practical projects based on project proposals:

- The selected project proposals are considered as pilot. The experience gained in implementing the provisions of the Programme will be used in other regions of the Russian Federation and other countries.
- A project proposal for the creation of a dedicated Centre of Industrial Development has been prepared by the project team. The Centre will aim to ensure the completion of the full innovative cycle, regulating questions associated with intellectual property, within the framework of the Comprehensive Sectoral Programme.

Further actions under the project

Based on the work carried out during the reporting period and resulting in the formulation of the Comprehensive Sectoral Programme for 2017-2025 and the corresponding Roadmap, the main task for 2018 is the finalization of the project proposal "Creation and support to activities of the Centre of Industrial Development". The Centre will be established as an instrument of practical implementation of the Comprehensive Programme, aimed at providing management support for the integrated projects.

Media coverage

The project activities were covered by the following media:

1. UNIDO Centre official website, 01.03.2017, article "Programme for sectoral development of foundry industry" // http://www.unido.ru/news/prog_razvitija_lit_proizvodstva/
2. Preparation of a special issue for the online version of the magazine "UNIDO in Russia": "The role of medium and small-sized business in the development of comprehensive sustainable economy in Russia", March 2018

E-Waste Academy for CIS Countries

3

Background

Implementation dates:

2017 – 2018

Project coordinator:

Vladimir A. Komissarov,
weerecyclers@gmail.com

Objective – enhancement of capacities of employees of relevant ministries in CIS countries through the creation of a network of experts that could further distribute information on e-waste management and available BAT/BEP in their respective countries.

Project tasks – provision of a training in e-waste management for employees of relevant ministries from CIS countries, including regional ministries from the Russian Federation, with the aim to ensure favourable conditions for development of modern systems of e-waste management including the preparation of draft legislative and regulative acts at the federal and regional level.

The course of the E-Waste Academy was conducted within the framework of the project on establishing an integrated regional system of waste electrical and electronic equipment (WEEE) management in the CIS Member States. The concept of the project was developed and first presented by the UNIDO Centre during the meeting of the Industrial Policy Council of the CIS in 2014. The E-Waste Academy is a follow-up to the UNIDO project “BAT/BEP Centre for environmentally safe disposal of potentially hazardous consumer products and industrial wastes”, which was implemented by the UNIDO Centre in 2010-2015.

Project partners

- Association of WEEE Recyclers;
- United Nations University (UNU).

Events

15 – 19 May 2017

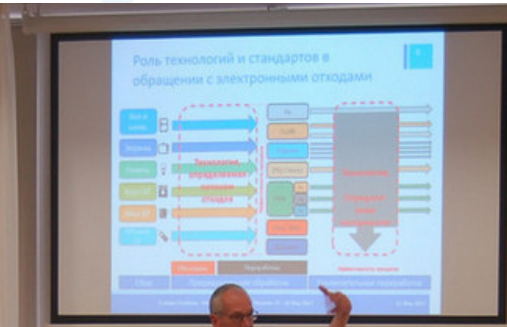
Training course of the E-Waste Academy, Managers Edition, took place in Moscow, Russia.

18 May 2017

As part of the E-Waste Academy, UNIDO Centre in collaboration with the Dmitry Mendeleev University of Chemical Technology of Russia, organized a seminar on WEEE management for the teaching staff of Russian universities.

Major achievements of the project

3



A training course for managers and a seminar for teaching staff of Russian universities were held in Moscow within the E-Waste Academy.

The Academy has laid the foundations to intensify an active fruitful cooperation among the experts in e-waste management from the CIS Member States and facilitate the exchange of knowledge and experience among them.

The course gathered over 30 participants representing ministries and governmental agencies, business associations and non-commercial organizations from 8 countries of the CIS: Azerbaijan, Armenia, Belarus, Kazakhstan, Kirgizstan, Russia, Tajikistan, Uzbekistan. The lectures of the course were delivered by international experts from a number of leading organizations for waste management from Austria (Elisabeth Herbeck, DRZ), Belgium (Klaus Sparn, Umicore), UK (Federico Magalini, UNU; Jonathan Perry, Dell), Germany (Klaus Willke, Ralph Wollmann and Isabel Wagner, UBA); Italy (Giorgio Arienti and Luca Campadello, Ecodom), Portugal (Nancy Isarin, Ambiendura), Russia, Switzerland (Arthur Haarman, Empa), Czech Republic (Michal Mazal, Asekol).

The course consisted of lectures, seminars, practice sessions, roundtable discussions. During the course, the participants had an opportunity to learn about the legislation on WEEE management in different countries, as well as acquire practice-based knowledge on how to organize an e-waste management business in compliance with legal requirements, including on transboundary movements of waste for further processing. Moreover, the participants learnt about easy methods to sort plastics contained in WEEE, which often represents a challenging task that waste-recycling companies face at the start of their business. The dismantling session, during which the participants had to dismantle different types of e-waste, helped them to further understand the specifics of business operations in this field. During this session, the participants learnt about the composition of various appliances, as well as about possible ways of commercial use of not only marketable fractions but also of the fractions which are not yet commonly used for commercial purposes.

One of the key parts and results of the course were the action plans on developing an environmentally-sound and commercially attractive system of e-waste management for a chosen country or region, that were prepared and presented by the working groups of participants.

As part of the E-Waste Academy, UNIDO Centre in collaboration with the Dmitry Mendeleev University of Chemical Technology of Russia, organized a seminar on WEEE management for the teaching staff of Russian universities. The seminar included presentations and reports delivered by international experts, professors of Russian universities, as well as a roundtable discussion with the participation of the heads of Russian leading waste-recycling companies. During the roundtable discussion, participants touched upon such topics as the current situation and challenges of the waste-recycling industry in Russia, as well as possible ways for universities to contribute to the development of an e-waste collection and recycling sector in Russia.



Further actions under the project

The continuation of the project is scheduled for 2018 with further training envisaged for representatives of relevant ministries, business, regional administrations and NGOs from CIS countries. The training course will tentatively take place in Almaty, Kazakhstan, and will focus on sharing experience on e-waste management in EU countries, Belarus and Russia. Legal aspects will be discussed, particularly, the extended producer responsibility principle as a core element of the process. Practical issues of business management in the field will be raised, and the experience in e-waste management presented by representatives of businesses from Belarus, Russia, Italy, etc.

3 The participants will receive information on the current state of the project on the development of a coordinated e-waste management system in the CIS, methods of movement of e-waste for processing in other CIS countries, taking into account the requirements of the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal.

Media coverage

The project activities were covered by the following media:

1. Council on Ecological Construction, 11.05.2017, article “Board member of the Council, Marina Nekrasova, will take part in the seminar “The Issue of Electronic Waste in Russia and the ways of solving it: the role of Universities” // <http://www.rugbc.org/ru/news/chlen-pravleniya-soveta-marina-nekrasova-primet-uchastie-v-seminare-soveschaniy-problema-elektronnyh-othodov-v-rossii-i-puti-ee-resheniya-rol-universitetov>
2. A series of press releases of The Association of Recyclers of Electronic and Electrical Equipment Wastes, 15.05.2017, article “Training course of the E-Waste Academy” // <http://weerecyclers.ru/news/>
3. A series of press releases of Dmitry Mendeleev University of Chemical Technology of Russia, 18.05.2017, article “The problem of electronic wastes - the role of Universities in its solution” // <https://events.muctr.ru/announcements/detail.php?ID=10233>



Publications

The UNIDO Centre official magazine “UNIDO in Russia” is published on a regular basis.

The publication is intended to provide information support of UNIDO projects and activities, coverage of the events organized by the Organization and the Centre aimed at attracting foreign technology and investments related to modernization of the Russian industry and economy, promotion of Russian technologies in other countries and assistance in the placement of funds of Russian investors abroad.

The magazine is distributed through the Investment and Technology Promotion Offices (ITPO) and the Ministry of Foreign Affairs of the Russian Federation to the largest government agencies and industrial enterprises of the Russian Federation.

The magazine covers the following topics:

- Automotive industry
- Mining industry
- Rail transport
- Housing and public utilities
- “Green” building
- Medical industry
- Metallurgical industry
- Waste management
- Food Industry
- Industrial Ecology
- Vocational education
- Rocket and space industry
- Fishery
- Agriculture
- Textile Industry
- Fuel industry
- Chemical and Petrochemical Industry
- Refrigeration industry
- Power industry



In 2017 UNIDO Centre initiated a monthly publication of newsletters covering key events that took place during the previous month. This document is primarily intended for the main partners of the Centre from among the ministries and institutions of the Russian Federation.

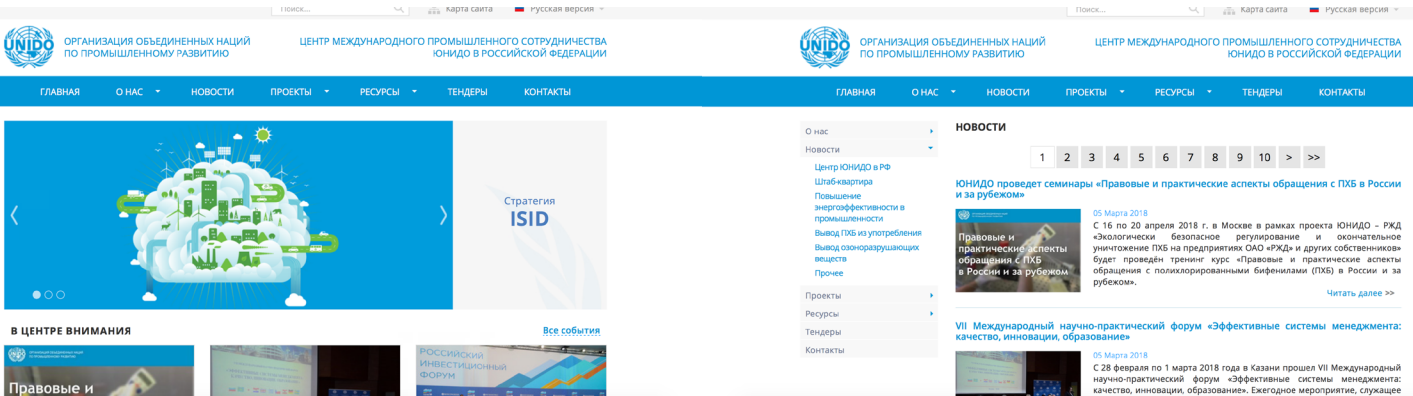


Internet resources

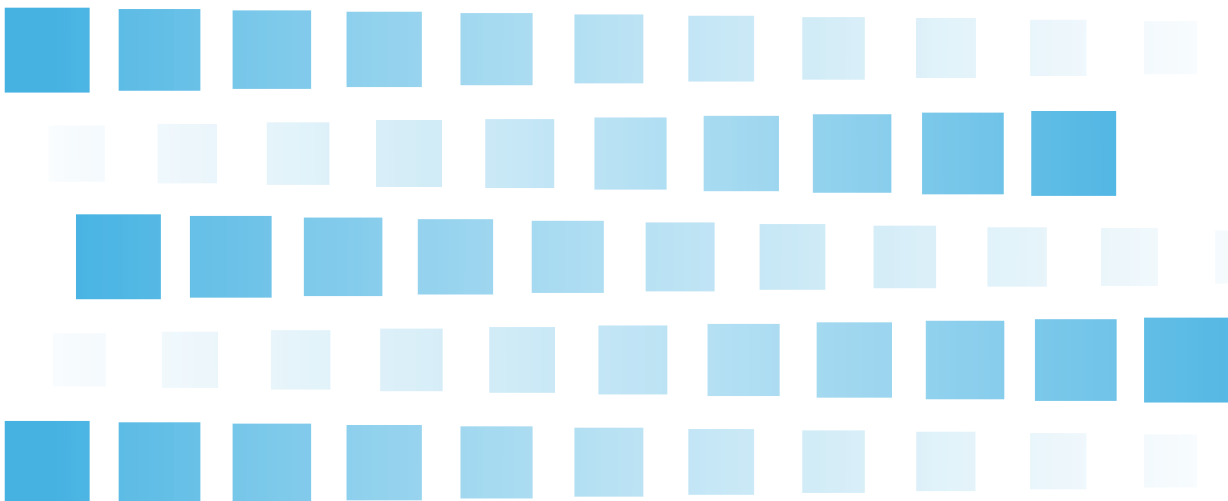
5

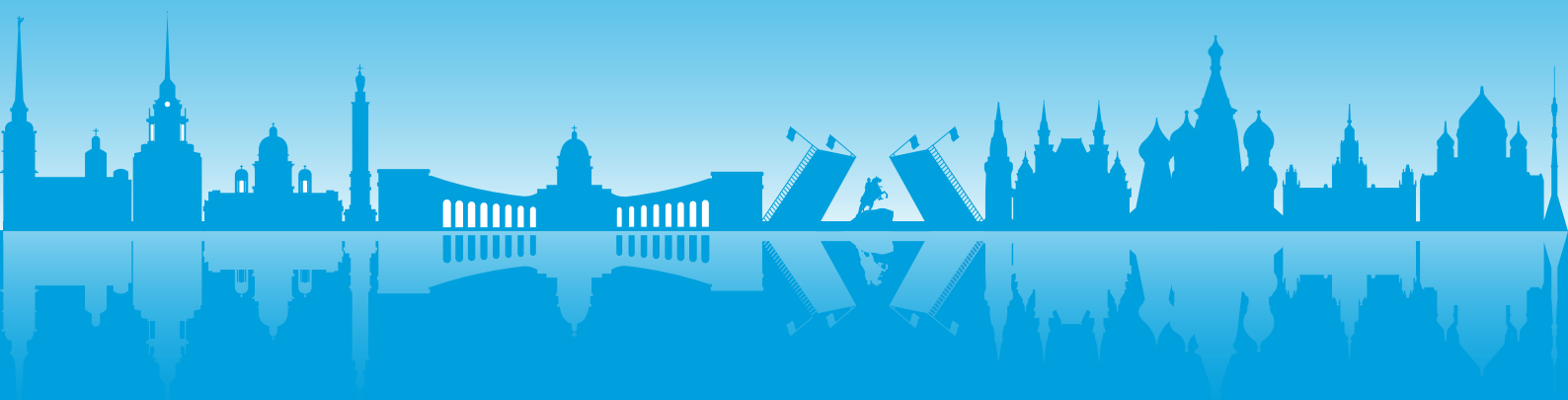
The following websites were established to inform on the activities of the UNIDO Centre and UNIDO Projects in Russia:

- The UNIDO Centre official website (www.unido.ru) is devoted to the description of the mission and activities of the Centre in Russia and abroad, providing information on completed and ongoing projects. The website news line is regularly updated.



- Online version of the magazine “UNIDO in Russia” (www.unido-russia.ru).





UNITED NATIONS
INDUSTRIAL DEVELOPMENT ORGANIZATION

UNIDO Centre for International Industrial Cooperation
in the Russian Federation

Address:	Kuusinenen str. 21B 125252 Moscow Moscow, Russian Federation
Telephone:	+7 499 943-00-21
Fax:	+7 499 943-00-18
E-mail:	itpo.moscow@unido.org