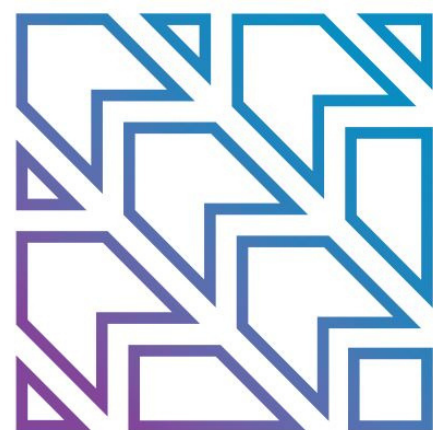




GEORGIAN
ENERGY EXCHANGE
THE FIRST YEAR



2020 // GENEX



Creating Opportunities

December 2020

ADDRESS BY DIRECTOR GENERAL

Irina Milorava

Therefore, over the past year, the main focus has been on the highest involvement of current and potential market participants - with the help of our consultants and international organizations, a number of training were held on both theoretical and practical issues of market functioning. The registration of participants on the trading dry-run platform allowed them to get directly acquainted with the operation of the platform and strengthen the necessary skills for trading.

I would also like to take this opportunity and to thank all the international organizations that have been actively involved in the support of developing the exchange over the past year – Energy Community Secretariat and United States Agency for International Development (USAID) Energy Program. Using the recommendations and experience gained from these projects, we will be able to establish an efficient and transparent organized market and thus contribute to the development of the energy sector and to create a sustainable investment environment.

I would especially like to thank both the existing and potential market participants involved in the reform. Without their high interest, this stage would not have been successful. All your recommendations, comments, questions help us to objectively and thoroughly evaluate each subsequent step and make the right decisions. We hope that fruitful cooperation will be continued in the future.

Thank you for your interest
We create opportunities!



Dear readers,

I am glad to have the opportunity to greet you on behalf of the Georgian Energy Exchange and to represent the one-year report - activities carried out by our team, our achievements, and challenges.

The energy exchange plays a special role in the ongoing reform of the Georgian energy sector and in the new market model. This is a market segment that will enable market participants to trade electricity on non-discriminatory terms, on a competitive basis. The market price set based on the electricity supply and demand will give the right market signals to both, existing and new investors and, we hope, this will significantly increase the interest in the Georgian electricity sector.

Obviously, against the background of these challenges, the reliability of the exchange is especially important - a sophisticated technical platform for trading that will function efficiently, without any gaps, and where the fair price is set transparently. This challenge was answered when the oldest European energy exchange Nord Pool was selected as a partner of the Energy Exchange. Nord Pool's experience and reputation is a clear message to both local and foreign investors and an important prerequisite for the success of Georgian market reform. One of our main challenges is the knowledge and awareness of exchange participants - the market will not function effectively if the participants are not ready enough to trade in the market.

ABOUT US

Georgian Energy Exchange was established on December 4th, 2019 with 50-50% ownership by JSC Georgian State Electrosystem and JSC Electricity Market Commercial Operator. Day-ahead and Intraday Markets licensed operator since May, 28th 2020.

Main functions:

- Day-ahead market operation
- Intraday market operation
- Bilateral contracts (forward) market operation
- Managing of the financial clearing system for Day-ahead and Intraday markets

Mission:

To ensure transparent and competitive markets and to provide accurate price signals to existing and potential market participants through efficient operation of the electricity markets.

Vision:

The Georgian Energy Exchange is a place of electricity trading not only for the purpose of supplying the Georgian market but also represents the regional hub used by coupled markets participants for cross border trading purposes.



Who we are
TODAY



IRAKLI GALDAVA
DEPUTY GENERAL DIRECTOR

Mr. Irakli Galdava has about 10 years of experience in energy sector. Irakli holds MA in Economics (Energy Economics concentration) from International School of Economics at Tbilisi State University (ISET). He started his career in energy sector at ISET Policy Institute, local think tank, in 2011, as a research fellow in energy sector. Irakli joined Georgian Energy Exchange after spending up to 6 years at Georgian Energy and Water supply Regulatory commission. At the same time, he used to deliver lectures and training and is a co-author of the rulebooks and articles about energy sector. Having assessed the energy markets from different point of view he gained comprehensive understanding of the energy and other economic sectors.



EKA LOLUA
FOREIGN SECRETARY

Eka Lolua was awarded Bachelor's and Master's academic degrees in Law from Caucasus University. For the professional development, Mrs. Lolua completed courses related to European and International Studies at the University Institute of European Studies and Centre of Studies on Federalism (UIES, Italy), the Vrije Universiteit Brussels (VUB, Belgium), the European Institute of Public Administration (EIPA, Luxembourg), the European College of Security and Defense (ESDC) and HarvardX programme. Eka Lolua has 8 years of working experience. At various times Mrs. Lolua worked in the National Food Agency under the Ministry of Agriculture, International Chamber of Commerce (ICC), in 2016-2018 she held the position of Head of European Integration Unit at the Ministry of Internal Affairs of Georgia. Since 2018, Mrs. Lolua had been holding the position of Legal Advisor at Energotrans Ltd - in the project establishing Georgian Power Exchange, in 2019-2020 worked as a lawyer in the Georgian State Electrosystem and participated in Energy Market reforming process. Mrs. Lolua was managing US and EU-funded projects as a part of her professional duty during working in various positions.



TAMAR BARSONIDZE
CHIEF LAWYER

Mrs. Barsonidze has 4 years of experience in energy sector. Tamar holds LLM from the University of Sussex (Brighton, UK) and from the Tbilisi State University (Tbilisi, Georgia). Tamar started her career in energy sector at the Georgian Energy and Water Supply Regulatory commission, where she worked for 3 years. Her main responsibility was to prepare drafts necessary for continuous improvement of energy regulation and to introduce them to the Commission. Tamar also has 3 years of experience at the Ministry of Justice of Georgia, where she drafted pieces of primary legislation, to support significant legal reforms ongoing in the country.

GENEX
TEAM

For 2021 GENEX plans to expand its team up to 17 staff members



LEVAN GACHECHILADZE
FINANCE MANAGER

Levan Gachechiladze has successfully graduated from Georgian American University's Bachelor and Master programs in Quantitative Finance. He joined GAU first as an Assistant Professor to the Dean of Business School and, now, holds the position of Invited Lecturer. His professional career started with a position of Financial Analyst at the Loans Management institution. Later he joined the Financial Department of Central Bank of Georgia. He also worked as a Financial Manager of an international tour operator. Followed by a position of Financial Analyst at the Financial Department of Bank of Georgia and Financial Consultant at Georgian State Electrosystem, currently, he is also a Quant Researcher in NY based hedge fund.



GUGA KUPRADZE
MARKET TECHNICAL OPERATOR

Guga Kupradze joined the team of the Georgian Energy Exchange in January 2020 and currently holds the position of Market Technical Operator. Guga is currently a graduate student in the Department of Electrical Engineering at San Diego State University. In 2016-2017 he became a finalist of the Future Leaders Exchange Program (FLEX) and studied in the United States for one academic year. While living in the US, he was awarded a special diploma from the US Department of State for the successful completion of the Academic year. After returning to Georgia and successfully attending university, he received funding from the Millennium Challenge Corporation and several times became a Presidential Fellow for Outstanding Academic Achievement. In 2018, participated in the project organized by the Embassy of the United States of America, "FLEX-Ability," (Vilnius, Lithuania). For four years in a row, Guga has been a member of the Dean's List of the University and has been given the opportunity to work as an Assistant Lecturer in Computer Engineering. In 2019-2020 he became a graduate of HarvardX, DelftX and the Asian Development Bank Institute, majoring in Energy Markets, Energy Policy and Energy Economics.



NATIA BARNOVI
ACCOUNTANT

Natia Barnovi joined the team of the Georgian Energy Exchange in December 2019 and holds the position of accountant, which involves the accounting of the enterprise according to international standards, preparation of declarations and financial statements in accordance with tax compliance, and submission to relevant government agencies. Natia Graduated from Tbilisi Financial-Economic Institute in 1997 and since that she has already gained 20 years of experience working with, y both in government agencies and in the private business sector. During 2009-2018 he held the position of Chief Specialist in the Finance and Economic Department of the Ministry of Finance of Georgia. She also held the position of Accountant in the Accounting, Reporting, and Auditing Supervision Service of Georgia, which is part of the Ministry. Prior to joining the Energy Exchange team in 2019, she held the position of Accountant at the LEPL Levan Sakvarelidze National Center for Disease Control and Public Health. Natia has passed the full educational program of the Georgian Federation of Professional Accountants and Auditors (Buffy) and is certified as a Chief Accountant.

ELECTRICITY MARKET MODEL

TARGET MODEL

Electricity market target model implies a free market, where the participants benefit from equal, nondiscriminatory conditions, and the competitive price is established transparently giving customers the opportunity of free choice.

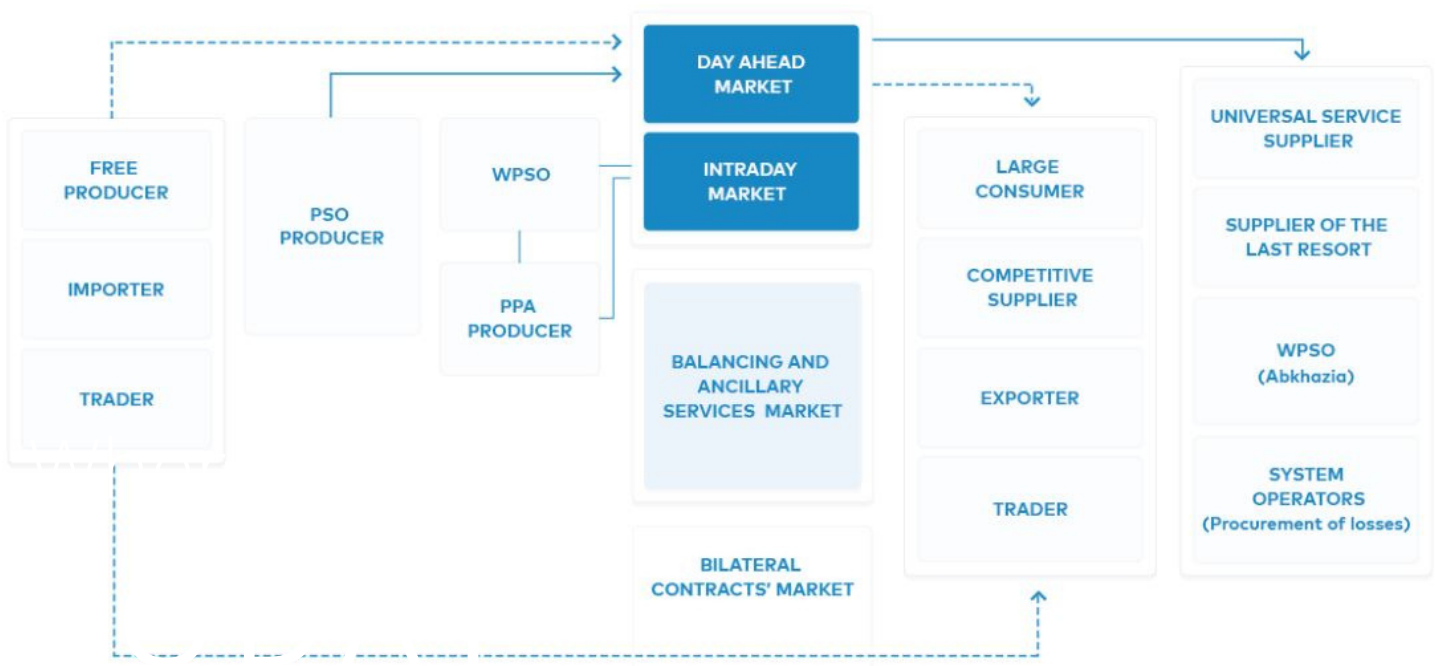
ELECTRICITY MARKET CONCEPT

On April 16th, 2020 Government of Georgia adopted the Electricity Market Model Concept. The document sets the following novation principles in electricity trading:

- Hourly trading and self-dispatching
- Imbalance responsibility
- Wholesale public service

Electricity Market Concept also sets the stages of market opening, as well as defines market segments and rights & responsibilities of market participants.

NEW MARKET MODEL





ELECTRICITY TRADE POLICY IN GENEX

On 11 August 2020, the Georgian National Energy and Water Supply Regulatory Commission approved the Market Rules, which include:

- Day-Ahead and Intraday Market Rules, submitted by the GENEX
- Balancing and Ancillary Services Market Rules, submitted by the Balancing and Ancillary Services Market Operator

The Day-Ahead and Intraday Market Rules define all the important aspects of trading at the electricity Exchange: participant's admission at the Exchange, order submission, price formation, financial settlement, and others. While working on the draft, GENEX created an electronic platform, allowing stakeholders to submit their opinions, questions, and recommendations.

At the same time, GENEX received participants' remarks via email and updated the draft accordingly, whenever participants had questions, GENEX sent explanations. The staff of the Regulatory Commission was actively involved in this process.

The draft submitted by the GENEX to the Regulatory Commission was updated as a result of these discussions and it included remarks of the stakeholders.

GENEX will continue its work for continuous development of the market rules and will periodically submit the draft amendments to the Commission, always provided that these amendments are prepared with the involvement of stakeholders.



INTERNATIONAL COOPERATION

Consultation and software solutions for Georgian day-ahead and intraday markets are provided by Nord Pool Consulting and Nord Pool.

Nord Pool was the world's first established power market back in 1993 and has more than 25 years of power market experience built on offering flexibility, transparency, innovation, greater choice, and participation to our customers. Today Nord Pool operates both day-ahead and intraday markets, delivering clearing and settlement as well as compliance services to their customers. More than 360 customers from 20 countries trade on Nord Pool's markets. Today the company operates markets across 16 European countries and is servicing power markets in Bulgaria and Croatia.

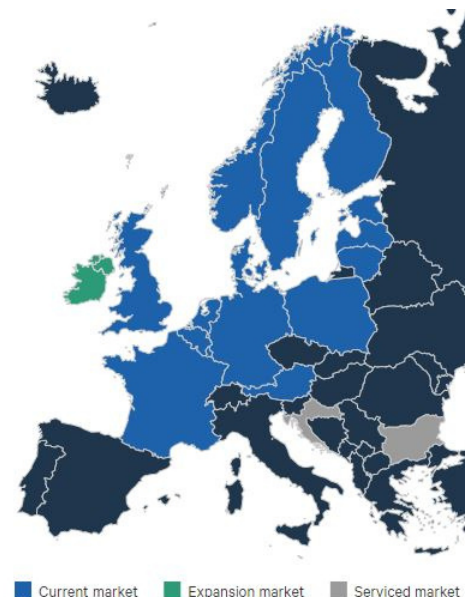
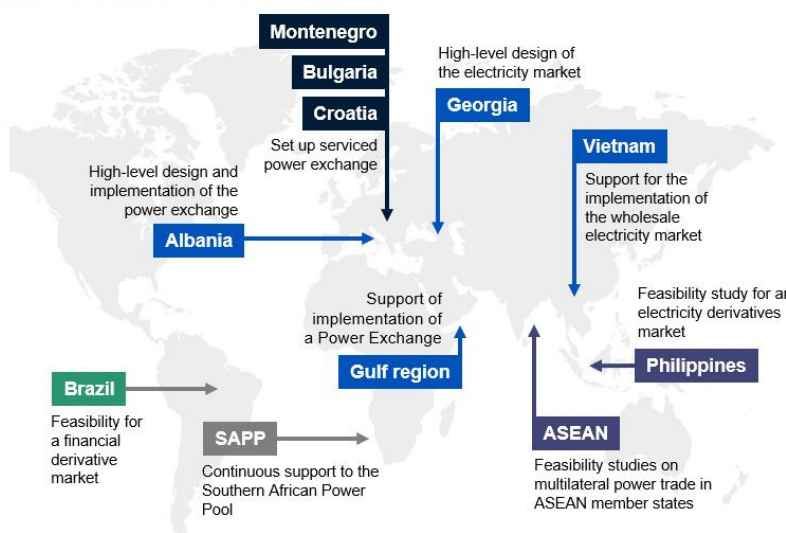
In 2019 Nord Pool had a total turnover of 494 TWh traded power. The company has offices in Oslo, Stockholm, Helsinki, Tallinn, London, and Berlin.

The Cooperation with Georgia started back in 2018 within the frames of MoU adopted among Ministry of Economy and Sustainable Development of Georgia, Georgian State Electrosystem and Bluberries GmbH, followed by the service agreement between GSE and NPC.

NORD POOL MARKETS

NORD POOL CONSULTING

A selection of projects recently completed



[CLICK HERE](#)

[CLICK HERE](#)



Along with the Ministry of Economy and Sustainable Development of Georgia, Regulator and other authorities GENEX was involved in the negotiation process with Energy Community informing on the progress of Georgian Energy Reform and consulting on compliances between EU acquis and Georgian legislative initiatives as well as proper harmonization of Georgian-European energy market models.



OMNIA
THE PLURAL OF ENERGY

For the harmonious implementation of Day-ahead/Intraday and Balancing/Ancillary services markets, Georgian Energy Exchange actively cooperates with German-based consulting company "Omnia" and "SIEMENS" and its subcontractor "Smarttech" - Austrian based company responsible for providing balancing software to Georgian Balancing Market Operator. This cooperation is implemented within the frame of a working group set under JSC "Georgian State Electrosystem".

SIEMENS

SMARTTECH

Georgian Energy Exchange actively cooperated with United States Agency for International Development (USAID) Energy Program to provide capacity building training on the establishment of centralized bilateral contracts markets (OTC) for potential market participants.



USAID

FOR FURTHER CONTENT PLEASE [CLICK](#) ON LOGOS

INTERNATIONAL
COOPERATION

GENEX is looking forward to further enhance international cooperation frames and to start collaborate with other international organizations, companies, projects and programs.

DAY-AHEAD MARKET DRY-RUN



PLAN

From July 1st, 2020 the Day-ahead Market Dry-run was officially opened.

Day- ahead Dry-run Plan considers the following:

- **Trainings** - Trainings aim to provide theoretical and practical knowledge to participants to trade on the exchange. Awareness of the participant is crucial as a misleading action of one participant may affect the whole market.
- **Simulative Trading** - To practice trading participants have access to a test trading platform.
- **Test/Exam** - According to the Electricity Market Rules, the trade representatives of participants may participate in the market upon successful completion of the qualification exams organized by GENEX.

The Dry-run process was particularly busy by organizing training for the participants registered in Day-ahead Market simulation, as well as configuring the test-trading environment.

Each session was attended by more than 100 representatives of more than 60 companies, including transmission and distribution system operators, production and consumption companies, and other interested parties.

ACTIVITIES



GENEX organized more than ten training sessions, covering the following issues:

- The economic basis of electricity trade
- Wholesale electricity markets
- Energy market reform in Georgia
- Georgian Energy Exchange (GENEX) markets
- Balancing market of the Georgian State Electrosystem
- Legal regulatory framework of the exchange
- Service markets concept and Nord Pool trading platform
- Live demo and Day-ahead auction platform and payment system
- The Day-ahead bid curve and portfolio management - example
- Registration as a market participant
- Valuation and management of water resources

The training was conducted by Nord Pool Consulting experts and the Georgian Energy Exchange team, the economic part of the sessions was covered with the assistance and involvement of USAID, Norwegian Water Resources and Energy Directorate (NVE) also supported target group capacity strengthening on water valuation issues.

On September 17th, 2020, “Georgian Energy Exchange” registered and created the First trading portfolios in the Nord Pool trading system for the candidates willing to participate in Day-ahead Dry- run trading.

The three sessions of simulative trading were held simultaneously with OTC market training supported by the USAID energy program. The participants were given possibilities to trade on bilateral bases, as well as to balance their portfolios through the Day-ahead market.

FINDINGS

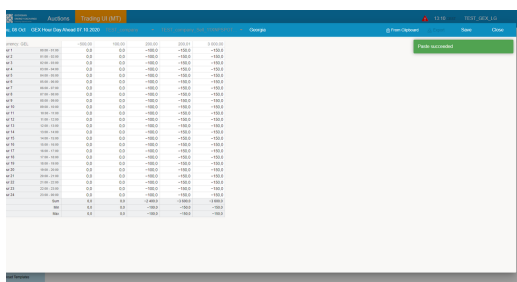
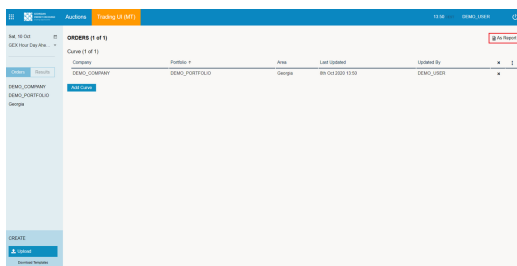
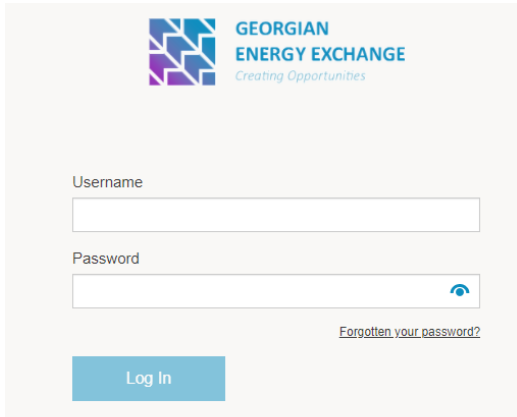
At the end of all training sessions, Georgian Energy Exchange organized non-obligatory testing, 78 participants took part in totally. The main purpose of knowledge checking was to give self-assessment possibilities to participants as well as to provide an example of the future certification process.

A total of 73 companies and individuals applied to the “Georgian Energy Exchange” to participate in the Dry-run trading, among them are current market participants and other stakeholders.

Dry-run trading platform access enabled simulation market participants to get directly acquainted with the Nord Pool trading system, place orders, and get test trading results at an early stage.

In order to establish and operate a transparent and reliable system of Day-ahead and Intraday markets financial clearing, GENEX held meetings with commercial banks operating in Georgia, as well as with Banks Association of Georgia and representatives of its members. The prospective of future cooperation was discussed during the meetings.

GENEX actively cooperates with the scientific- academic community, such as Tbilisi State University and Ilia State University for the purpose to enhance understanding of Georgian Energy Market Reform specificities.



DAM
DRY-RUN

**Nord Pool testing environment
 will be accessible after the
 Market launching**



MEDIA COMMUNICATION



For effective public communication, Georgian Energy Exchange has registered its official Facebook, LinkedIn, YouTube, and Twitter social pages. Subscribers have the opportunity to get acquainted with the news related to energy reform and other ongoing processes.



As for the Branding activities, the exchange logo and motto were created and a communication strategy was developed.



The official web-page: www.genex.ge is launched.



For public awareness-raising purposes and within the framework of GENEX communication strategy, the Georgian Energy Exchange team actively participated in different training-meetings and media platforms.



FUTURE PLAN

- Day-ahead dry-run simulative trading sessions
- Clearing and Settlement system setup
- Certification of member's representatives
- Members registration
- Establishing an efficient market surveillance and transparency system
- Day-ahead Market launching
- OTC Market Dry-run
- OTC Market Launching
- Cooperation with neighboring and other countries on cross border trading possibilities for Georgia
- Intraday Market Dry-run
- Intraday Market launching
- Strengthen international cooperation, including collaboration with partner countries, exchanges, organizations, programs, and projects
- Member's capacity strengthening activities - exclusive cooperation with Nord Pool Academy
- Continuation of the media campaign to raise public awareness of the energy sector
- Strengthen the GENEX team and its capacities





Creating opportunities

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