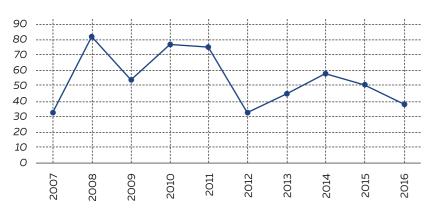
#### Dynamic data of energy production (2007-2016), GWh



The average electricity production is 55.3 GWh/year which is below the yearly planned amount of 65 GWh/year.

Over the last five years the annual electricity production plan was not fulfilled as a result of the decreased water flow of the River Prut annual electricity production plan was not fulfilled.





#### **Technical data**



#### Water turbine type

PL-30-3B-360 Kharkov "Turboatom", Ukraine – install capacity of 16 MW/h, the available capacity being of about 10 MW/h and the wear degree of 67%. Turbine water flow capacity – 65 m /sec.



#### Electromagnetic generator type

VGS 525/119-32 "Uralelektrotyazhmash", Russia Electrical substation - 110/10-0.4 kV making the link with Romanian side of the power plant.

#### **Investments**

Complete overhaul of the turbine: 2007 approx. 4 million MDL (200,000 USD); 2012-2013 – approx. 9 million MDL (450,000 USD)

# Why invest?

- Constantly growing energy consumption;
- Government commitment to create conditions for opening the electricity market in Moldova and further pan-European integration;
- The most cost-competitive form of electricity production;
- HPP-Costeşti has price-competitive electricity production, producing electricity five times cheaper than energy from external sources.



For more information please contact:

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Profiles of the companies designated for privatisation by the government of the Republic of Moldova in 2017





# Costesti Hydro Power Plant

The State owned enterprise "Nodul Hidroenergetic Costesti" – Costesti Hydro Power Plant (HPP Costesti) is an electricity power production plant located in Costesti town in the Republic of Moldova on the Prut River – 580 km from the confluence with Danube River This is the interstate cross-border power plant shared equally by Moldova and Romania (Costesti-Stanca). The hydro dam built across the Prut River is holding back the water and forming the Costesti-Stanca reservoir.

HPP Costesti is a self-sustained organization. The revenue of organization is depending on the level of water accumulated in reservoir and electricity production tariffs adopted by ANRE – the National Energy Regulatory Agency of the Republic of Moldova.



#### **Key Facts about Moldova**

Population	3.55 million
Area	33,846 km²
GDP per capita at PPP, 2015	€ 4,514
GDP current prices, 2015	€ 5.78 billion
Inflation rate, 2015	9.7 %
Local currency	Moldovan Leu (MDL)

#### **Electricity quantitative indicators:**

Electricity production	939 GWh
Distributed electricity, total	4254 GWh
Distributed electricity to residential sector	1670 GWh

Moldova is a member of the Energy Community Treaty since 2010. In less than 6 years Moldova implemented the Energy Package 2 and is currently implementing the Energy Package 3

#### **Background Information**

The hydro-technical construction, also known as Costesti-Stanca Lake and dam, is delimiting the Republic of Moldova from Romania. Built between the years 1973-1978, the Costeti-Stanca construction is an USSR-Romanian project. The main goal of building this power station was to protect villages down the Prut River from annual floods, to provide irrigation and water supply for communities, and electricity production from the hydropower.

With a capacity of 1.4 billion cubic meters of water, Costesti-Stanca reservoir covers 6,000 hectares at a normal water retention level. It can reach 9,000 hectares when the reservoir is filled to its maximum capacity. At present, the hydro-technical hub is jointly exploited by the Republic of Moldova and Romanian authorities. The two parties agree on the water flows released into the downstream area, as well as on any other action aimed at controlling the accumulation of water inside the dam and downstream from it. All decisions regarding the exploitation of the reservoir are taken together with the Romanian side.

The Costesti-Stanca dam has two hydro power plants with installed electric capacity of 16 MW on both sides. The first kilowatt was produced on 28 June 1978.

#### **Electricity production**

Electricity production in Moldova relies on a dominant electricity producer, the gas-fired thermal power plant Cuciurgani-Moldavskaya GRES (2,520 MW installed capacity) located in the region of Transnistria. The electricity purchased from this power plant and potential imports from Ukraine meet up to 80% of the overall demand. The remaining 20% is covered by gas-fired combined heat and power generation and one hydropower plant in Moldova.

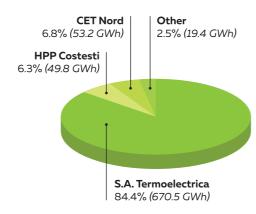
Of all energy sources in Moldova, HPP Costesti accounts for holds 6.8% of country electricity production.

## **Electricity distribution**

In 1997, as a result of unbundling the State owned company "Moldenergo", five electric power distribution companies were created, namely: JSC «RED Chisinau», JSC «RED Nord», JSC «RED Nord», JSC «RED Sud». In 1999 started the privatization process of the distribution companies and other important energy assets. In 2000 the Spanish group «Union Fenosa» privatized four state-owned electric power distribution companies JSC "RED Chisinau", JSC "RED Sud", and JSC "RED

## Reservoir map **Abstractions** Discharges Sadoveni • Republic of Moldova Horodiste Ripiceni Varatic Duruitoarea Romania Costesti-Stanca Reservoir Costesti European Union Waterbody Stanca **Prut river**

# Electricity production structure of the Republic of Moldova:



Centru", which account for 70% of the total electric power market of the country (JSC "RED Union Fenosa").

Thus, the three distribution system operators in Moldova are the state-owned RED Nord, RED Nord-Vest and RED Union Fenosa, owned by the Spanish company Gas Natural Fenosa.

## **Electricity supply**

The two state-owned distribution companies have been legally separated from supply activities since August 2015. A single state-owned supply company JSC "FEE Nord" (also subject to privatization) has received the supply license and supplies electricity to the final consumers connected to the two state-owned distribution companies (RED Nord-Vest and RED Nord).

In the same year Gas Natural Fenosa Furnizare Energie Ltd was established as a supply company legally separated from distribution activities of JSC RED "Union Fenosa".

## Rates for electricity production

ANRE adopted separate production tariffs for all four production companies, as of 1 April 2017:

JSC "Termoelectrica":

Financial data

JSC "CET-1" - 166.14 bani/kWh (0.086 USD/kWh)
JSC "CET-2" - 158.63 bani/kWh (0.082 USD/kWh)

JSC "CET-Nord": 170/137.11 bani/kWh (0.088/0.071 USD/kWh)

HPP Costesti: 23.3 bani/kWh (0.012 USD /kWh)

HPP-Costesti has price-competitive electricity production, producing electricity five times cheaper than the one imported from external sources.

The JSC RED Nord-Vest and JSC "RED Nord" are on the list of state-owned objects that are subject to privatization.

# Regulatory framework

The electricity sector in Moldova is governed by the Electricity Law of 2016 and Energy Law of 1998. Other relevant legislation includes the Law on Conducting Licensed Activities, the Law on Public Service, the Law on Basic Principles of Regulating Entrepreneurial Activity, the Law on Customer Protection, and the Concession Law.

The Energy Regulator, ANRE, is an independent organization responsible for setting energy tariffs and financed by market participants through regulatory fees. ANRE implements state policy on energy sectors regulation, ensures regulation and monitoring of the efficient functioning of the energy market and performance of activities.

Regulatory approach to Distribution activity is stimulatory: Base Cost x (I-x) + RAB x WACC; Base costs are approved once in 5 years; WACC in 2016 - 13%;

In accordance with the Energy Community Treaty, unfair treatment of investors can be contested at the Energy Community Secretariat in Vienna;

#### **General overview**

Type of activity:
Electricity production (License AA 0005603, until - 20.12.2025)
Legal address:  MD-5617, Costești city, Rîșcani, Republic of Moldova
Year of foundation: 2000
Working capital: 16 073 994 lei
Founder: The Ministry of Economy - 100%
Area of premises: 988.1 m2
Adjacent land surface:  2.95 ha
The average number of employees:  22 persons

# Sales revenues 10,273,260 MDL (532,293 USD) Net profit 1,028,650 MDL (53,298 USD) Fixed assets 17,220,800 MDL (892,269 USD) Current assets 2,241,850 MDL (1,200,200)

(116,158 USD)

