

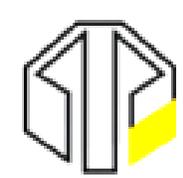


APPENDIXES



TOP-12 SOES FOR PRIVATIZATION IN 2016

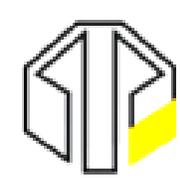




TOP SOES FOR PRIVATIZATION IN 2016

Company	Industry	Revenue 2015 year, USD mln*	Share for privatization, %
Odesa Portside Plant	Fertilisers	512,5	99,6%
Tsentrenergo	Energy Generation	314	78,3%
Kharkivoblenergo	Energy Distribution	226	65,0%
Mykolayivoblenergo	Energy Distribution	98,5	70,0%
Zaporizhzhyaoblenergo	Energy Distribution	378	60,2%
Khmelnyskeoblenergo	Energy Distribution	65	70,0%
Ternopiloblenergo	Energy Distribution	46,5	51,0%
Cherkasyoblenergo	Energy Distribution	11	46,0%
Odesa CHP	Energy Generation	18	100,0%
Kherson CHP	Energy Generation	12,5	99,8%
Mykolayiv CHP	Energy Generation	11	100,0%
Dniprodzerzhynsk CHP	Energy Generation	12	99,9%

*Average NBU exchange rate 21,8447 UAH/USD for 2015



FERTILIZERS: ODESA PORTSIDE PLANT



Key highlights

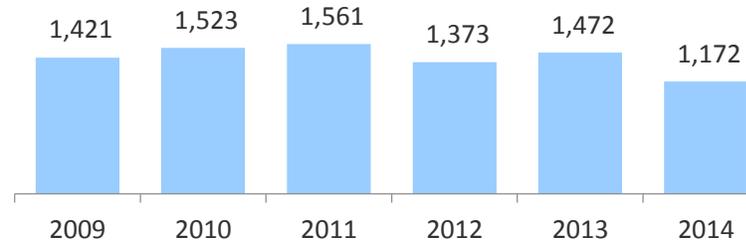
- The Odesa Portside Plant (OPP) is a major chemical production company accounting for 17% of ammonium nitrate and 19% of urea production capacity in Ukraine
- A specific advantage of the plant is that it is located at the end-point of the ammonia pipeline Tolyatti-Gorlovka-Odesa and operates sea chemicals transshipment terminal:
 - Transshipment services provide additional source of revenue
- Apart from ammonium nitrate and urea OPP produces liquid nitrogen, carbon dioxide, liquid oxygen and sodium sulphate
- The plant due to its strategic location and connection to the chemical transportation infrastructure is export oriented
 - Export sales account up to 85% of the output
 - Major export destinations incl. EU countries and USA
- The OPP's financial performance is highly dependent on natural gas prices, with gas constituting 80 % of the production costs
 - In 2014, apart from the natural gas supplies from the state-owned company Naftogaz OPP started importing gas from Hungary through reverse facilities
- The Odesa Portside Plant is state-owned by 99.57%

Key financials (according to national GAAP)

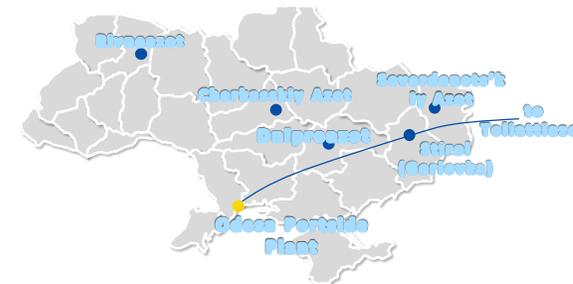
UAH m	2012	2013	2014	2015
Revenue	5,372	4,904	5,428	11,195
Gross profit	168	(811)	(39)	1426
EBITDA	(12)	(1,034)	(132)	983
Net profit	(116)	(1,144)	(270)	211
Total assets	2,240	2,756	8,827	3,352
Financial debt	-	-	4,603	3,178

Source: Company's data

OPP fertilizers output, kt

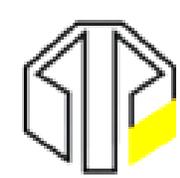


Ammonia pipeline and chemical producers



OPP capacities overview, mt pa

Production	
Ammonia	1.1
Urea	0.9
Liquid nitrogen, carbon, dioxide, liquid oxygen and sodium sulphate (non-significant quantities)	
Total production capacities	2.0
Transshipment	
Ammonia	4.3
Urea	5.0
Methanol	1.0
Liquid fertilizers	0.5
Total transshipment capacities	10.8



ENERGY GENERATION: TSENTRENERGO



Key highlights

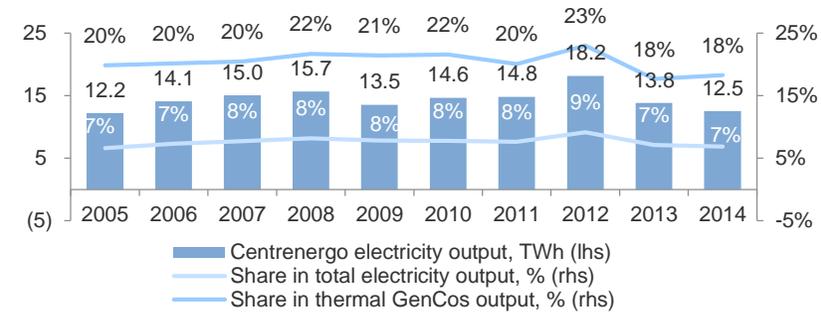
- PJSC Tsentrenergo is Ukraine's 2nd largest thermal generator with capacity of 7,600 MW. It operates 3 power plants in Kyiv, Kharkiv and Donetsk regions and has own repair services company Remenergo
- The Company produces up to 9% of total electricity in Ukraine, generating 15-18 TWh annually. PJSC Tsentrenergo's share among all thermal GenCos reaches 22-23%
- In March 2013, a fire broke out at PJSC Tsentrenergo's Vuhlehirska thermal power plant which forced shutdown of Vuhlehirska TPP for 7 months of 2013. Currently, 3 out of 4 damaged coal-fired blocks are fully reconstructed and operational
- Further decrease in electricity generation in 2014 is explained by the scarcity of the anthracite coal consumed by Trypilska and Zmiivska TPPs and which was previously produced by the mines located in Donetsk and Lugansk regions currently left on the separatists-controlled territory. The company tried to make up for the shortage by importing coal from South Africa and Russia
- Majority stake in PJSC Tsentrenergo is state-owned (78.3%),

Key financials (according to national GAAP)

P&L (UAH m)	2011	2012	2013	2014	2015
Revenue	7,180	9,063	7,454	7,558	6,864
Gross profit	546	884	780	294	312
Gross margin	8%	10%	10%	4%	5%
EBITDA	391	558	770	311	249
EBITDA margin	5%	6%	10%	4%	
Net profit	35	234	487	71	70
Balance Sheet (UAH m)	2011	2012	2013	2014	2015
Total assets	4,318	4,507	5,027	5,281	6,644
incl. PPE	2,147	2,091	2,026	2,088	
Total equity	1,863	2,086	2,503	2,428	2,481
Total liabilities	2,454	2,420	2,523	2,853	4,162
incl. financial debt	567	699	784	182	

Source: Company's data

Share in electricity generation in Ukraine



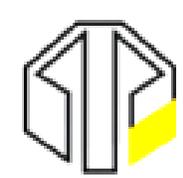
Key assets geographical location



Key indicators

	Trypilska	Zmiivska	Vuhlehirska	Total
Installed capacity	1 800 MW	2 200 MW	3 600 MW	7 600 MW
incl. gas-fired blocks	2x300 MW	-	3x800 MW	3 000 MW
incl. coal-fired blocks	4x300 MW	6x175 MW 3x275 MW 1x325 MW	4x300 MW	4 600 MW
Coal grade	A/T	A/T	G	-
Fuel consumption per kW	406 g/kW	405 g/kW	370 g/kW	-
Electricity production (2014)	3,869 GWh	5,002 GWh	3,643 GWh	12,514 GWh
Headcount, employees*	1 812	2 879	2 852	8 226**

*In 2013. ** incl. Remenergo



ENERGY DISTRIBUTION: KHARKIVOBLENERGO



Key highlights

- JSC Kharkivoblenergo is one of the largest power distributing companies in Ukraine, which transmits and supplies energy to the highly industrialized Kharkiv region
- The Company serves 1.2 m households and 3,000 industrial customers (mostly machine-building plants). The Company's largest consumers are water and heating utilities, the Kharkiv metro operator, and power machinery plants Turboatom and Elektrovazhmash
- The 2 groups - households and industrial customers account for 42.5% and 30.7% of the oblenergo's energy sales, followed by commercial non-industrial consumers (23.5%), and municipal users (3.3%)
- JSC Kharkivoblenergo owns a 47,273 km grid with 8,162 MVA of transformer capacity
- Number of employees at the Company is ca 7,100
- The State holds a 65.0% stake in JSC Kharkivoblenergo

Key financials

UAH m	2012	2013	2014	2015
Revenue	3,397	3,656	3,948	4,941
Gross profit	190	128	67	226
EBITDA	448	294	298	312
Net profit	29	29	30	32
Total assets	2,271	2,376	2,667	3,344
Total equity	1,955	2,007	2,247	2,635
Total liabilities	316	369	420	709

Source: Company's data

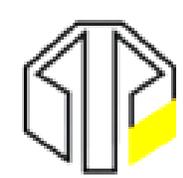
Key assets geographical location



- Region area: 31.4k sq. km
- Region population: 2.8 m
- Key industries: machinery, construction materials, chemical industry, food and processing industry, agriculture

Key indicators

Operating metrics	2012	2013	2014
Distributed to customers (GW·h)	5,577	5,670	7,364
Grid losses (%)	13.8%	13.04%	12.44%



ENERGY DISTRIBUTION: MYKOLAYIVOBLENERGO



Key highlights

- PJSC Mykolayivoblenergo transmits and supplies electricity in Mykolayiv region; the Company is the monopolist in the region. It serves 476,000 residential customers and 16,000 commercial and industrial customers: population and industrial enterprises are the main customers groups accounting for 46% and 24% of sales respectively
- Its installed transformer capacity is 3,361 MVA (6,000 substations). PJSC Mykolayivoblenergo owns 25,000 km of overhead transmission lines and 1,463 km of underground power cables. The Company also owns three small HPPs: 12,2 GW-h of electricity produced in 2014
- The state regulator approved UAH 80m of CapEx for the Company for 2014 and UAH 74m for 2015: modernization and reconstruction of transmission lines and equipment account for the bulk of CapEx. The wear rate of the lines averages 60%
- The Company has around 3,550 employees
- In terms of financial leverage, PJSC Mykolayivoblenergo has relatively low bank debt, but owes UAH 376m to the state wholesale electricity market operator Energorynok. These liabilities were accumulated before 2010 and are now structured as a long-term debt
- The State holds a 70% stake in the Company.

Key financials

UAH m	2012	2013	2014	2015
Revenue	1,326	1,379	1,505	2,149
Gross profit	159	105	114	120
EBITDA	138	49	111	118
Net profit	32	17	15	11
Total assets	968	998	1 034	1 077
Total equity	335	345	357	365
Total liabilities	633	653	677	713

Source: Company's data

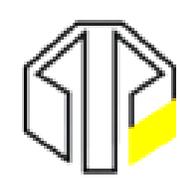
Geographic location and region of operations



- Region area: 24.6k sq. km
- Region population: 1.2 m
- Key industries: shipbuilding and other machinery manufacturing, food processing

Key indicators

Operating metrics	2012	2013	2014
Distributed to customers (GW·h)	2,647	2,615	2,577
Grid losses (%)	13.7%	12.3%	12.2%



ENERGY DISTRIBUTION: ZAPORIZHOBLENERGO



Key highlights

- PJSC Zaporizhyaoblenergo is a top-10 electricity distributor in Ukraine, supplying electricity to the heavily industrialized Zaporizhya region
- The Company serves 783k residential customers and 23k commercial and large industrial enterprises including:
 - steelmakers Zaporizhstal and Dniprospsststal, Zaporizhya Ferroalloy
 - engineering plants (e.g. Motor Sich)
- The oblenergo owns a 40,000 km low-voltage transmission grid with 9,749 MVA of installed capacity
- Number of employees at the Company is ca 5,800
- The State holds a 60.25% stake in the Company

Geographic location and region of operations



- ▶ Region area: 27.2k sq. km
- ▶ Region population: 1.9 m
- ▶ Key industries: engineering, metallurgy, energy-generation, industrial goods production and agriculture

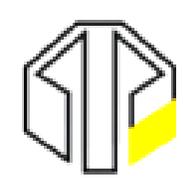
Key financials

UAH m	2012	2013	2014	2015
Revenue	5 050	4 747	4 070	8 260
Gross profit	64	77	8	169
EBITDA	133	180	8	148
Net profit	23	25	6	21
Total assets	2 290	1 487	1 736	2 367
Total equity	45	45	45	393
Total liabilities	1 107	1 144	1 365	1 974

Source: Company's data

Key indicators

Operating metrics	2012	2013	2014
Distributed to customers (GW·h)	8,327	8,298	8,472
Grid losses (%)	8.12%	8.97%	8.31%



ENERGY DISTRIBUTION: KHMELNYTSKEOBLENERGO



Key highlights

- PJSC Khmelnytskyeoblenergo transmits and supplies electricity in Khmelnytsky region; accounts for 75% of electricity sales in the region
- The Company serves 550,000 residential customers and 19,500 commercial and industrial customers. Population, industrial and other commercial enterprises are the main customers groups accounting for 42%, 14% and 11% of sales respectively
- Its installed transformer capacity is 3,127 MVA (7,300 substations)
- PJSC Khmelnytskyeoblenergo owns 35,000 km of overhead transmission lines and 1,000 km of cable power transmission lines
- The Company has around 3,560 employees
- The state regulator approved UAH 58m of CapEx for the Company for 2014 and UAH 51m for 2015
- The State holds a 70% stake in the Company.

Key assets geographical location



- ▶ Region area: 20.6k sq. km
- ▶ Region population: 1.3 m
- ▶ Key industries: machinery manufacturing, sugar production and other food processing

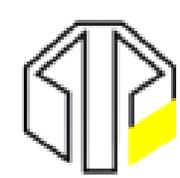
Key financials

UAH m	2012	2013	2014	2015
Revenue	933	1,001	1,101	1,420
Gross profit	90	110	60	119
EBITDA	115	129	109	155
Net profit	31	49	26	39
Total assets	544	899	878	1 551
Total equity	418	709	724	1 239
Total liabilities	126	191	154	312

Source: Company's data

Key indicators

Operating metrics	2012	2013	2014
Distributed to customers (GW·h)	2,067	2,127	2,121



ENERGY DISTRIBUTION: TERNOPILOBLENERGO



Key highlights

- PJSC Ternopiloblenergo transmits and supplies electricity to consumers in Ternopil region. It owns a 23,870 km grid with total transformer capacity of 4,382 MVA
- The Company serves ca 0.5 m of residential customers and several hundreds of industrial customers (mostly light and food industry plants and agri-businesses)
- Consumers base:
 - 53.6% - residential customers
 - 13.6% - industrial customers
 - 12.9% - municipal and state users
 - c.20% - other non-industrial customers
- The Company's headcount is c. 2,300 employees
- The State holds a 51% stake in JSC Ternopiloblenergo.

Key financials

UAH m	2012	2013	2014	2015
Revenue	655	721	787	1,015
Gross profit	585	68	34	82
EBITDA	64	81	36	87
Net profit	6	13	(16)	17
Total assets	653	708	752	766
Total equity	538	587	562	577
Total liabilities	115	121	190	189

Source: Company's data

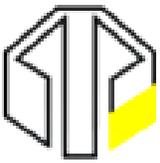
Geographic location and region of operations



- Region area: 13.8k sq. km
- Region population: 1.1 m
- Key industries: agriculture, light and food industry, machine-building and tourism

Key indicators

Operating metrics	2012	2013	2014
Distributed to customers (GW·h)	1,215	1,234	1,235
Grid losses (%)	18.0%	17.79%	17.26%



ENERGY DISTRIBUTION: CHERKASYOBLENERGO



Key highlights

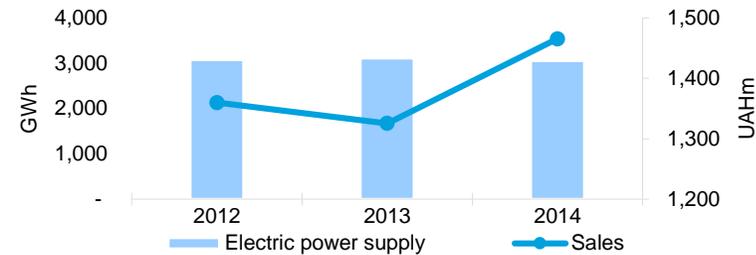
- PJSC Cherkasyoblenergo operates as an electric energy distributor and transmits electric energy in Cherkasy region. Company purchases electric energy from the state-owned enterprise “Energorynok” and distributes it to consumers via direct sales regulated by individual contracts.
- Electricity distribution in Ukraine is currently managed by 26 oblenergos, one per each region (except for Kyiv and Donetsk with two oblenergos). Being a natural monopolies, oblenergos are regulated by National Electric Energy Regulatory Committee (NERC).
- NERC sets retail tariffs for oblenergos based on expected costs, grid losses and CAPEX needs (cost-plus basis).
- Licensed area for Cherkasyoblenergo operations comprises 20.9k km. The enterprise supplies power to more than 632k consumers.
- Total length of aboveground electric power lines with voltage range of 0.4-154 kW amounts to 29.4 thousand km, whereas underground power cables with 0.4 – 110 kW voltage have length of 1.9 thousand km.
- Seasonality is common for the industry. In autumn and winter electric power supply increases by 25-30%. Maintenance cost related to transmission lines also tend to grow due to adverse weather conditions during that time.
- Government holds 46% stake in PJSC Cherkasyoblenergo.

Key financials

UAH m	2012	2013	2014	2015
Sales	1,360	1,326	1,466	2,350
Gross profit	31	79	68	131
EBITDA	52	56	70	74
Net income	4	4	4	25
Total assets	498	514	601	833
Debt	6	9	10	550

Source: Company's data

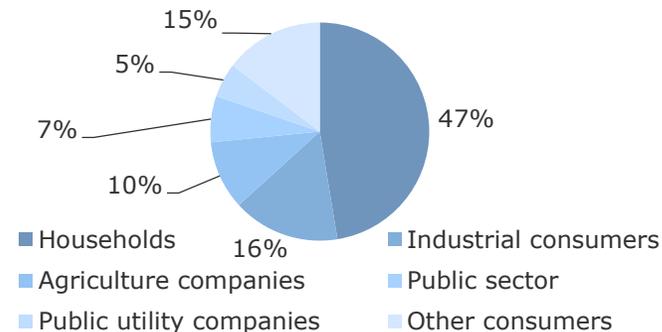
Electric power supply dynamics

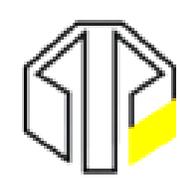


Enterprise location



Sales structure by type of consumers





ENERGY GENERATION: ODESA CHP

Key highlights

- PJSC Odesa TPP is the monopolist thermal power producer in the city of Odesa, one of the largest cities in Ukraine with population of c. 1m
- The fuel mainly used is natural gas and to some extent heavy oil
- The thermal power is transmitted via heated water for heating and hot water supply. Heated water and steam are supplied via 4 main thermal pipelines to the network of the municipal company Odesa Heating Supply responsible for delivering the power to the final customers (households and offices)
- Electricity generated is sold to the state-company Energorynok
- Similar to other TPPs in Ukraine operations of PJSC Odesa TPP are seasonal. The heating power and electricity are produced during the heating season- usually from October to April
- The stake owned by the state in PJSC Odesa TPP is 99.989%

Revenue Split, 2015



Key financials

P&L (UAH m)	2012	2013	2014	2015
Revenue	273.4	275.0	266.4	386
Gross profit	0.4	3.5	(4.7)	2
EBITDA	(0.2)	(81.6)	(107.0)	(55)
Net profit	(15.7)	(51.2)	(70.3)	(60)
Balance Sheet (UAH m)	31-Dec-12	31-Dec-13	31-Dec-14	31-Dec-15
Total assets	178.7	289.4	331.8	382
incl. PPE	56.2	92.2	87.5	
Total equity	(107.6)	(158.8)	(229.1)	(329)
Total liabilities	286.3	448.3	560.9	710
incl. financial debt	-	-	-	
incl. trade accounts payable	213.5	362.8	475.9	

Key assets geographical location

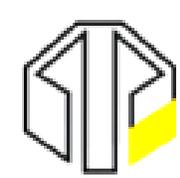


Key indicators

Operational parameters

Installed capacity	
• Heating	779 Gcal/hour
• Electricity	68 MWt
Production volumes, 2014	
• Heating	397,866 Gcal
• Electricity	58.9m kWh
Other parameters	
• # of employees (2014)	420

Source: Company's data



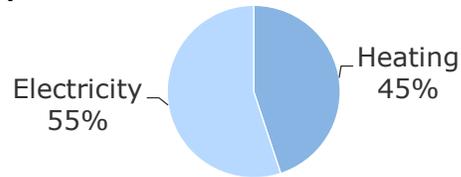
ENERGY GENERATION: KHERSON CHP



Key highlights

- PJSC Kherson TPP is a combined heat and power producer which is servicing up to 50% of the households which are receiving centralized heating supply of the Kherson city, the center city of the Kherson region having almost 400k inhabitants
- Natural gas in the main fuel while heavy oil could be used as supplementary. Natural gas is supplied by the state company NJSC Naftogaz
- Similar to other TPPs in Ukraine, operations of Kherson TPP are seasonal. The heating power and electricity are produced during the heating season usually from October to April
- The stake owned by the state in PJSC Kherson TPP is 99.8%

Revenue split, 2015



Key financials

P&L (UAH m)	2012	2013	2014	2015
Revenue	193.1	192.5	189.5	273
Gross profit	0.3	(5.8)	(14.6)	(14)
EBITDA	22.4	(17.7)	32.7	(36)
Net profit	8.5	(27.8)	15.6	(51)

Balance Sheet (UAH m)	31-Dec-12	31-Dec-13	31-Dec-14	31-Dec-15
Total assets	189.5	199.1	222.7	295
incl. PPE	84.7	86.1	78.8	
Total equity	9.2	(21.2)	(5.9)	(62)
Total liabilities	180.2	220.3	228.5	356
incl. financial debt	-	-	-	
incl. trade accounts payable	105.2	157.1	153.8	

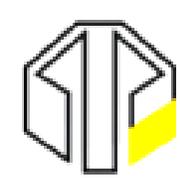
Source: Company's data

Key assets geographical location



Key indicators

Operational parameters	
Installed capacity	
• Heating	735 Gcal/hour
• Electricity	80 MWt
Production volumes, 2014	
• Heating	203,442 Gcal
• Electricity	72.9m kWh
Other parameters	
• # of employees (2014)	540



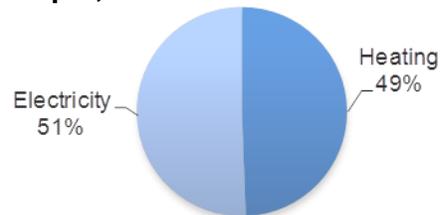
ENERGY GENERATION: MYKOLAYIV CHP



Key highlights

- PJSC Mykolayiv TPP supplies heating power to more than 40% of the households and enterprises of the city of Mykolayiv, the center city of the Mykolayiv region having almost 500k inhabitants
- The company is also important electricity generator in Mykolayiv
- Natural gas is the main fuel while heavy oil could be used as supplementary
- Similar to other TPPs in Ukraine operations of Mykolayiv TPP are seasonal. The heating power and electricity are produced during the heating season - usually from October to April
- PJSC Mykolayiv TPP is 100% state-owned

Revenue split, 2015



Key financials

P&L (UAH m)	2012	2013	2014	2015
Revenue	188.5	199.0	177.7	245
Gross profit	5.7	15.3	4.6	(4)
EBITDA	22.7	0.1	26	5
Net profit	15.2	(2.7)	17.2	0.3
Balance Sheet (UAH m)	31-Dec-12	31-Dec-13	31-Dec-14	
Total assets	75.9	103.5	117.9	132
incl. PPE	25.1	33.1	34.6	
Total equity	33.1	25.7	42.9	38
Total liabilities	42.8	77.8	74.7	94
incl. financial debt	-	-	-	
incl. trade accounts payable	29.4	63.1	57.9	

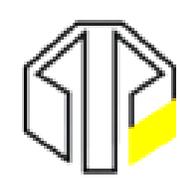
Source: Company's data

Key assets geographical location



Key indicators

Operational parameters	
Installed capacity	
• Heating	410 Gcal/hour
• Electricity	40 MWt
Production volumes, 2014	
• Heating	343,528 Gcal
• Electricity	94m kWh
Other parameters	
• # of employees (2014)	567



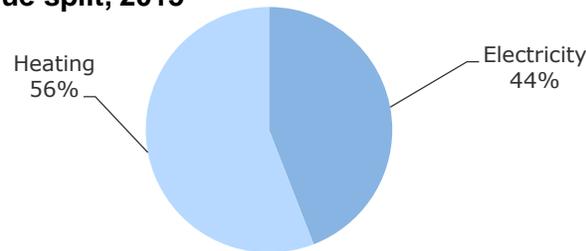
ENERGY GENERATION: DNIPRODZERZHYN SK CHP



Key highlights

- PJSC Dniprodzerzhynsk TPP is a combined heat and power producer which is servicing residential area of Dniprodzerzhynsk located on the right bank of the Dnipro river. Dniprodzerzhynsk is an industrial city in Dnipropetrovsk oblast having app. 240k inhabitants
- Natural gas is the main fuel used by the TPP. It is supplied by the state company NJSC Naftogaz
- The stake owned by the state in PJSC Dniprodzerzhynsk TPP is 99.9277%

Revenue split, 2015



Key financials

P&L (UAH m)	2012	2013	2014	2015
Revenue	187.7	183	176	269
Gross profit	9.4	6	5	21
Gross margin	5.0%	3.0%	3.1%	
EBITDA	(32.0)	1.5	14.2	(43)
EBITDA margin	-17.1%	0.8%	8.1%	
Net profit	(2.2)	0.1	0.5	(48)

Balance Sheet (UAH m)	31-Dec-12	31-Dec-13	31-Dec-14	31-Dec-15
Total assets	261.7	350.5	498.6	642
incl. PPE	32.0	42.5	44.9	
Total equity	2.2	(23.7)	(23.3)	(61)
Total liabilities	259.4	374.2	521.9	703
incl. trade accounts payable	152.3	281.6	395.1	

Source: Company's data

Key assets geographical location



Key indicators

Operational parameters

Installed capacity	
• Heating	313 Gcal/hour
• Electricity	61.6 MWt
Production volumes, 2014	
• Heating	323,437 Gcal
• Electricity	61.5m kWh
Other parameters	
• # of employees (2014)	409