Alstom in Poland

Alstom’s Presence

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KEY DATA

- Over 3000 employees in power generation, grid and renewable, Rolling Stock Factory in Chorzów and Pendolino Service Center in Warsaw
- State-of-the-art manufacturing base in Poland
- Poland is a key sourcing country for Alstom
- Alstom’s European excellence centre for turbogenerators is located in Wroclaw
- Alstom is the leader of coal EPC projects
- Alstom Konstal – one of the biggest suppliers of railway equipment to major European operators

History of Alstom in Poland / History

1990: Acquisition of Zamech in Elblag and Dolmel in Wroclaw by ABB
1997: Alstom (previously GEC Alsthom) acquires Chorzowska Wytwórnia Konstrukcji Stalowych (Chorzow Steel Structure Plant) currently the company acts under operates as ALSTOM Konstal S.A.name.
2000: Creation of ALSTOM Power Sp. z o.o. company (headquarters in Elblag)
2001: Merger of ALSTOM Power Generators Sp. z o.o. (Wroclaw) and ALSTOM Power Sp. z o.o. (Elblag).
Since then the company has been operating as ALSTOM Power Sp. z o.o. in Poland, starting rapid technology development, investments and taking leading position on Polish market.
1995 - 2005: Alstom Power conducted ‘turnkey’ modernisation of units 1-6 at PGE Turów Power
1997 - 2010: Alstom Transport delivered trams for several Polish cities as well as wagons for Warsaw metro
2000 - 2008: Execution of the ‘turnkey’ project involving the supply of a machine hall with a 470MW supercritical turboset and boiler island for Pątnów II Power Plant
2005 - 2009: Alstom Power executed the ‘turnkey’ package of a machine hall together with a cooling tower for PKE Łagisza Power Plant (Tauron Group)
2006 - 2011: Execution of 850 MW in Belchatów on EPC basis for PGE
2010: Creation of new branch of ALSTOM Power Sp. z o.o. in Katowice (Alstom Grid)
2011: Alstom signs the contract for delivery of first in Poland high speed trains type Pendolino for PKP Intercity
2014: Notice to Proceed: Alstom to provide two 900 MW units for PGE coal-fired power plant in Opole
2014: Pendolino Service Center in Warsaw is opened, in December first Pendolino trains start commercial operation

Corporate Social Responsibility

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Corporate Social Responsibility of Alstom in Poland (CSR) is a key element of the company’s activities. It is based on taking actions and creating business strategy taking into account expectations of the stakeholders: employees, business partners, local communities and environment.

Alstom is focused on ensuring sustainable development by using innovative technologies, processes and tools. CSR in Alstom means dialog and collaboration with stakeholders with ethics and transparency in operations. Caring for employees as well as limiting an impact on environment are key priorities for Alstom in Poland in CSR area.

Alstom in Poland signed a Corporate Social Responsibility Declaration of the French - Polish Chamber of Commerce in Poland's members. Alstom joined a group of companies with priorities focused on sustainable development, environmental protection and of those, who promote and use good CSR practices. Alstom in Poland is also a member of the UN Global Compact Network Poland.

Alstom in Poland acts through employees volunteering activities aimed at supporting local communities and supports education, e.g. by sponsoring science prizes (Nagrody Naukowe POLITYKI).

Awards and Certification/ Certificates

Quality certifications

- **Transport**: ISO 9001:2000, IRIS (International Railway Industry Standard certificates of French Railway SNCF, German Railway DB.
- **EHS**: ISO 14001 in 2004; OHSAS 18001 in 2007
- **Grid**: PN-EN ISO 9001:2009 & PN-EN ISO 14001:2005

Awards

- **Power**: Alstom awarded the “Golden Laurel in the field of Innovativeness 2012”. Alstom received recognition in the “Electric power generation” category for the “Retrofit of 13K215 steam power turbine” innovative solution dedicated to Polish power plants.
- **Power**: Alstom Power awarded Business Superbrands 2014/15 by Superbrands Poland

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Alstom Power leadership in coal EPC projects on the Polish market (since 1990)
Alstom is OEM for 95% of installed steam turbogenerators fleet.
The biggest and the most efficient generating unit in the history of Polish power industry - unit 858 MW in Belchatow PP (CCS ready) – was successfully executed by Alstom Power.

Key facts:
- Alstom Power plays a significant role in building modern power infrastructure in Poland
- Innovativeness in the field of solutions offered by Alstom in Poland received prestigious awards.
- Over 320 medium-size and large -size steam and gas turbines installed in power plants all over the world had been produced by Alstom Power in Poland.
- Own modern manufacturing base: turbine factory in Elblag, steel and nodular iron foundries in Elblag and generator factory in Wroclaw
- The project – PGE Belchatow II CCS - has been included in the EU Demonstration Program for C02 Capture and Storage.

Thermal Power / Steam

Key References:
- Turow (units 3x235MW and 3x260MW) PGE Group: 1995-2005, deep rehabilitation
- Patnow II (unit: 1x470MW): 2000-2008, turnkey project
- Lagisza (unit: 1x460MW): 2005-2009, turnkey package
- Belchatow II, new unit 858 MW, turnkey project

Ongoing Projects:
- Opole PP 2 x 900 MW, turnkey project

Thermal Services

Key references:
- Kozienice 9, 10 - LMZ 500 MW ST main OH + modernisation
- Opole 1 - Alstom 360 MW unit - main OH + modernisation
- Turow 5 - Alstom 260 MW ST main OH + modernisation
- Szczecin 1 - Alstom 65 MW ST main OH+ modernisation
- Patnow PP - LTSA for new Alstom ST and GEN 470 MW
- Polaniec 8 - Alstom 215 MW ST retrofit
- Burshtyn PP (Ukraine) - LMZ 200 MW ST modernisation
- Prunertov (Czech) - Alstom 215 MW ST modernisation
- Kostolac 2 (Serbia) - Alstom 348 MW ST main OH + modernisation
- Energoatom (Ukraine) - 5 x full rewind of 1000 MW GEN rotor
- PGE Belchatow unit 6: Integrated retrofit (boiler+STretofit), unit: 1x370MW,
- EdF Kraków I: LP upgrade, 120 MW,
- Janikowo (Ciech): DWFGD, 100MW,
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- Polaniec 8 (GdF Suez): ST (HP & IP retrofit) retrofit 1x220MW,
- Siekierki combined heat and power plant (PGNiG TERMIKA SA): modernisation of a UK-50 type steam turbine
- PGE Belchatow 7-12: Turbine and ESP retrofit on 6 units x370MW, NTP: 11/2010
- Patnow II: LTSA / ST scope, coal unit 470MW, NTP: 11/2010
- PGE Belchatow 7-12: Generator retrofit on 6 unit’s x 370MW, NTP: 03/2011
- Polaniec 2-7 (GdF Suez): modernization of 6 units

Grid

Alstom Grid in Poland means experienced and highly qualified staff and high-end technologies applied in products and service.

Key facts:
- Strong focus in Poland on turnkey projects in the field of 220 kV and 400 kV switchgears.

References:
- Łagisza 400kV substation based upon GIS technology,
- IKEA Centre and Wierzchowice GIS turn key projects
- Stocznia 110 kV GIS (Eltel NetworkOlsztyn)
- Żegrze 110 KV for IKEA Centre Polska
- Michałow and Hajnówka 15 KV (PGE Dystrybucja Białystok)
- 110 kV Żyrardów (PGE Łódź Teren)
- 110 kV Olecko (PGE Dystrybucja Białystok)
- S/S Białka Integrated Busbar Protection System (Tauron Bielsko – Biała S.A.)
- S/S RPZ8, Krynki and Wasilkow (Dystrybucja Białystok)
- Abramowice 220kV GIS turnkey project (PSE Operator S.A)
- Ustronie 110 kV GIS turnkey project (Tauron Dystrybucja SA)
- Łagisza - modernisation of 110 kV substation (Tauron Dystrybucja SA)
- 110 kV Huta Głogow (KGHM S.A)
- 220 kV Stalowa Wola ( ZWSE Rzeszów)
- Ołtarzew S/S GIS switchgears 400 kV, 220 kV, 110 kV (PSE Operator SA)

Renewables

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Renewables sector is represented by Industrial Steam Turbines facility located in Elblag (established in 2011). It focuses on power generation from renewable energy sources: geothermal, solar, biomass as well as wind and hydro energy.

**Key facts:**
- Growing market for 100 MW steam turbosets for combined cycles, „green energy” (i.e. biomass, Waste to Energy, geothermal etc.) as well as for steam turbosets up to 150 MW for solar applications manufactured in Elblag
- In June 2014 Alstom signed a contract with PGE Energia Odnawialna S.A., worth approximately €80 million, for the supply of 30 ECO110 wind turbines for the “Lotnisko 90MW” wind farm, which will be based in Kopaniewo.

**Ongoing projects:**
- 2014: Start of construction of the 90 MW Lotnisko wind farm
- Sengkang 2 – 65 MW (Indonesia), scope: GRT turbine, generator, auxiliary systems, turbine controller, condensing system South Boston – 50 MW; (USA), scope: GRT turbine, generator, auxiliary systems, turbine controller
- Crescent Dunes 125 MW (USA); delivery of first steam turbine solar application since 1990’s; scope: turbine, generator, auxiliary systems, turbine controller
- Plainfield – 45 MW; (USA scope: GRT turbine, generator, auxiliary systems, turbine controller
- DSW – 61 MW, (Israel), scope: GRT turbine, generator, auxiliary systems, turbine controller
- Altamita – 42 MW (Mexico), scope: GRT turbine, generator, auxiliary systems, turbine controller

**Transport**

Alstom Transport is represented in Poland by Alstom Konstal S.A with the seat in Chorzow (the company was established in 1864).

**Key facts:**
- In the years 1997-2005 Alstom Konstal was manufacturing and delivering Metropolis cars for Warsaw metro and tramways for more than 10 Polish cities, including Warsaw, Katowice, Szczecin and Gdańsk.
- Chorzow factory is the leading rolling stock exporter implementing numerous international projects, such as Citadis tramways for Instanbul and Metropolis metro cars for Budapest and Amsterdam.
- The implementation of the largest ever modernisation programme - over PLN 267 million (1997-2011). Between 1997 and 2011 the implementation of the largest modernisation programme with total cost exceeding 267 million PLN took place
- In 2012 Alstom Konstal opened two new production halls: a paint shop and a welding and erection shop. The
total investment is worth approximately €8 million (PLN 32.8 million). The manufacturing capacity will increase in the field of carriage body painting from 20 to 40 carbody shells and the steel carriage body production from 20 to 40-50 per month.

- Pendolino high speed trains service centre was constructed in April 2014
- Alstom’s Pendolino, the first in Poland high speed trains for Polish PKP Intercity entered into the revenue service in December 2014.

References:
- METROPOLIS trains for Warsaw 18 x 6-car train sets
- CITADIS for Gdańsk (4 tramways) and Katowice (17 tramways)
- CITADIS for Istanbul – 37 tramways
- X’Trapolis for Melbourne (X’TRAPOLIS Platform), 270 painted body shells
- Since 2002 – continuous CITADIS projects developed for several cities
- METROPOLIS trains for Budapest (22 five-car trainsets + 15 four-car trainsets) and Amsterdam (26 trains) metro
- Tram Train NG - 196 underframes for VPF + 15 TS (new batch)– UF steel with prefitting + roof steel with prefitting
- Porter POLYVALENT (Regiolis) – components for 727 CBS – chassis, cabin, roof and wall components
- Coradia Meridian (TRENITALIA) – 343 painted and pre-equipped car bodies
- Coradia Meridian (FNM)- 72 painted and pre-equipped car bodies
- Lint Dieselnetz Koeln (DB AG) – 165 painted car bodies
- Lint Abellio - 18 sets of car body components
- Lint LNVG VII – 36 sets of car body components
- Lint LNVG VII – 20 painted car bodies
- Lint Dieselnetz Suedwest (Netinera) – 144 painted car bodies
- Lint Dieselnetz Suedwest (DB AG) – 76 painted car bodies
- LINT Eifel-Westerwald-Sieg Abellio (EWS) - 14 painted car bodies
- Lint AKN - 34 painted car bodies
- Lint Dieselnetz Ost West - DNOW/TOW (DB AG) - 34 painted car bodies
- Lint LNVG VIII - 12 painted car bodies
- Lint Ostbayern - 24 painted car bodies