

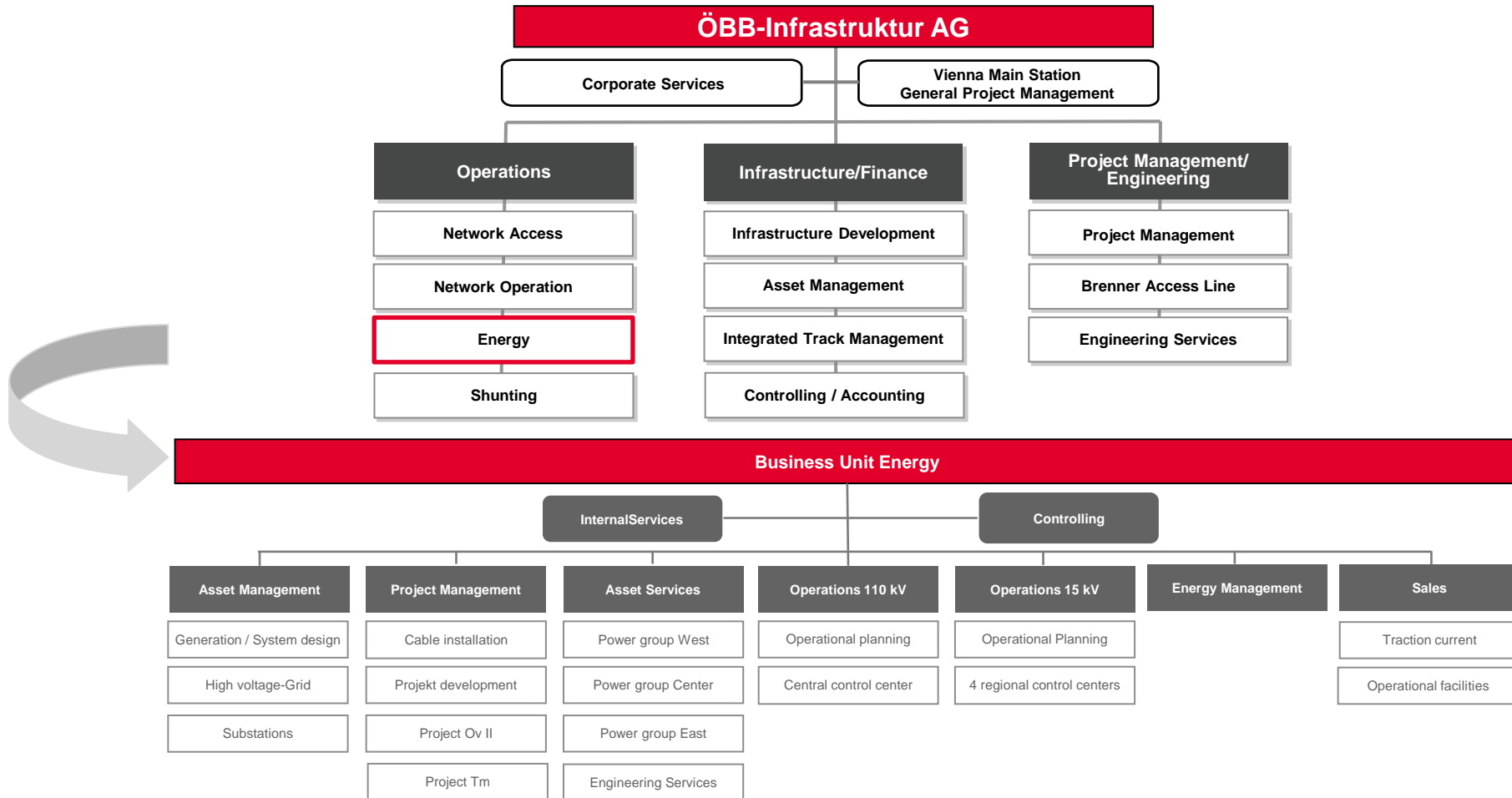


ÖBB-Infrastruktur AG
Business Unit ENERGY

Enthusiasm through
excellence!



ÖBB-Infrastruktur AG



Object of business

16.7 Hz traction power supply

- Generation and distribution of 16.7 Hz power
- Business management of the 16.7 Hz traction power supply
- Sale of 16.7 Hz traction current to all the railway companies in Austria
- Facility management incl. erection of power plants, frequency converters and substations, traction current lines and control centers

Energy supply of operational facilities

- Generation and distribution of 50 Hz power
- Control and monitoring of 50 Hz power supply
- Purchase and sale of 50 Hz current, natural gas, heat, cold to all of the group's commercial units and external customers on railway areas
- Facility management for power grids

Energy services

- Energy metering for railway undertakings by use of RailwayBox
- Energy economy-related services for major customers in the energy market from portfolio analysis via balance group management and market access to full supply

Our goals



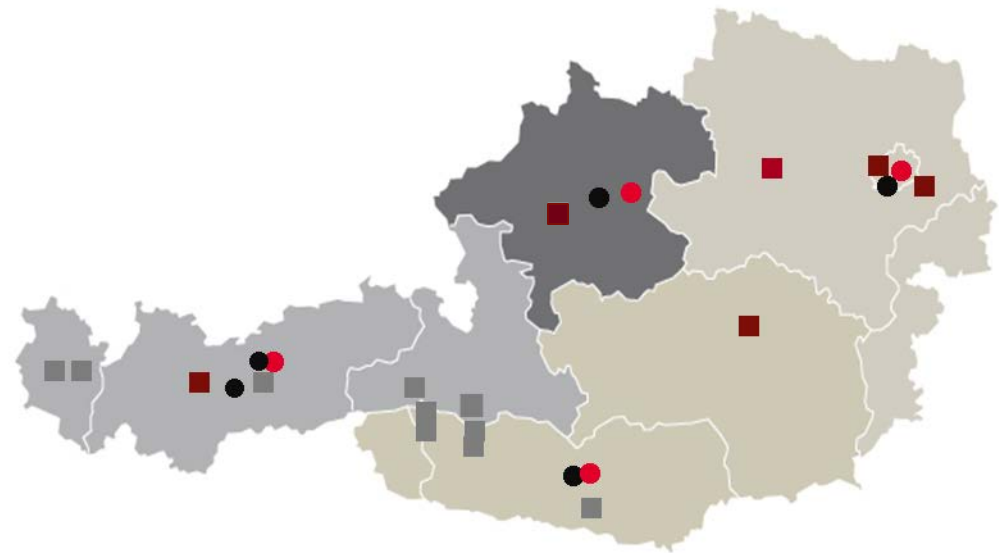
- **Maintaining high quality and reliability of traction power supply in Austria**
- **Stabilization of energy procurement costs**

- **Acquiring and maintaining know-how in traction power supply**

- **"Reasonable" growth in market segments - sustainably increase of the economical value of the business unit**
 - **Growth in power generation with all of the renewable energy sources available in Austria**
 - **Enhanced integration in processes and markets of railway companies**

Energy is everywhere

- **Office locations**
Vienna, Linz, Villach, Innsbruck
- **Control centers**
Regional control center Meidling,
Attnang, Villach, Zirl
Central control center Innsbruck
- **Hydro power plants**
Schneiderau, Enzingerboden, Uttendorf I,
Uttendorf II, Fulpmes, Spullersee, Braz,
Obervellach, Lassach, Rosenbach
- **Frequency Converter**
Auhof, Bergern, Kledering, St. Michael,
Ötztal, Timelkam



Figures – Data – Facts (2012)



361 employees

8	16.7 Hz hydro power plants
2	50 Hz hydro power plants
6	Transformer stations
1	Converter stations
62	Substations
2	Substation stands
8	Mobile substations
5	Control centers
2.023 km	Power transmission line
65 km	Cables

**24 million €
investments**



**92 % of traction current
gained from renewable
energy sources**

**548 million €
Sales revenues**



Traction power supply (2012)

16.7 Hz traction power supply

We produce approximately one third of traction power demand in Austria in our 8 hydro power plants.

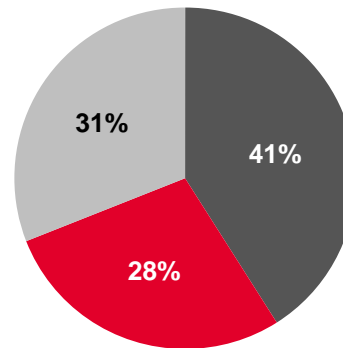
We supply:

- more than 1,000 electric locomotives and electric power cars
- 70 preheating devices for trains
- 20 heating testing facilities
- 1,086 points heaters

as well as a wide range of train radio stations, UPS and emergency power stations

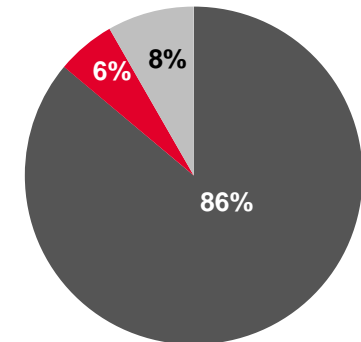
We provide measuring equipment for the acquisition of power demand and offer pertinent services such as metering value transmission and analysis. For motive power units, tracking of locations is possible by means of GPS.

Traction power procurement
1.941.836 MWh



- Generation in ÖBB power plants
- Acquisition from partner power plants
- Acquisition through ÖBB converters/frequency changers

Traction power demand
1.824.000 MWh



- ÖBB-PR GmbH
- stationary facilities
- external railway undertakings

Energy Supply (2012)

Energy supply of operational facilities

We are the energy supplier of the entire ÖBB group.

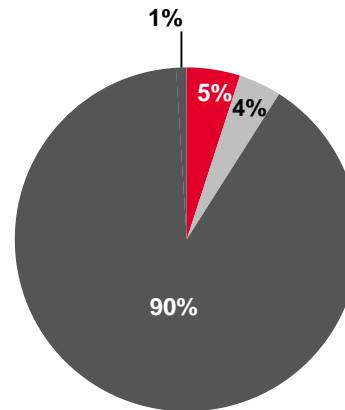
We supply

- more than 7,839 bases with 50 Hz current
- 742 bases with natural gas
- 206 bases with cold
- as well as 448 bases with heat.

We support our customers in

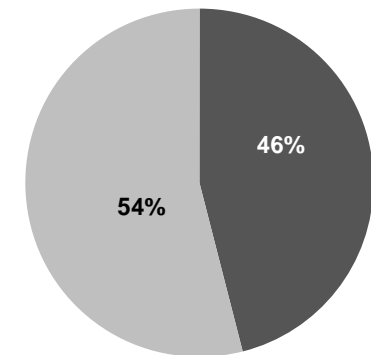
- Energy monitoring
- Energy demand planning,
- Energy demand acquisition and
- Measures for efficient energy use.

**Total value of raised energy
348.307 MWh**



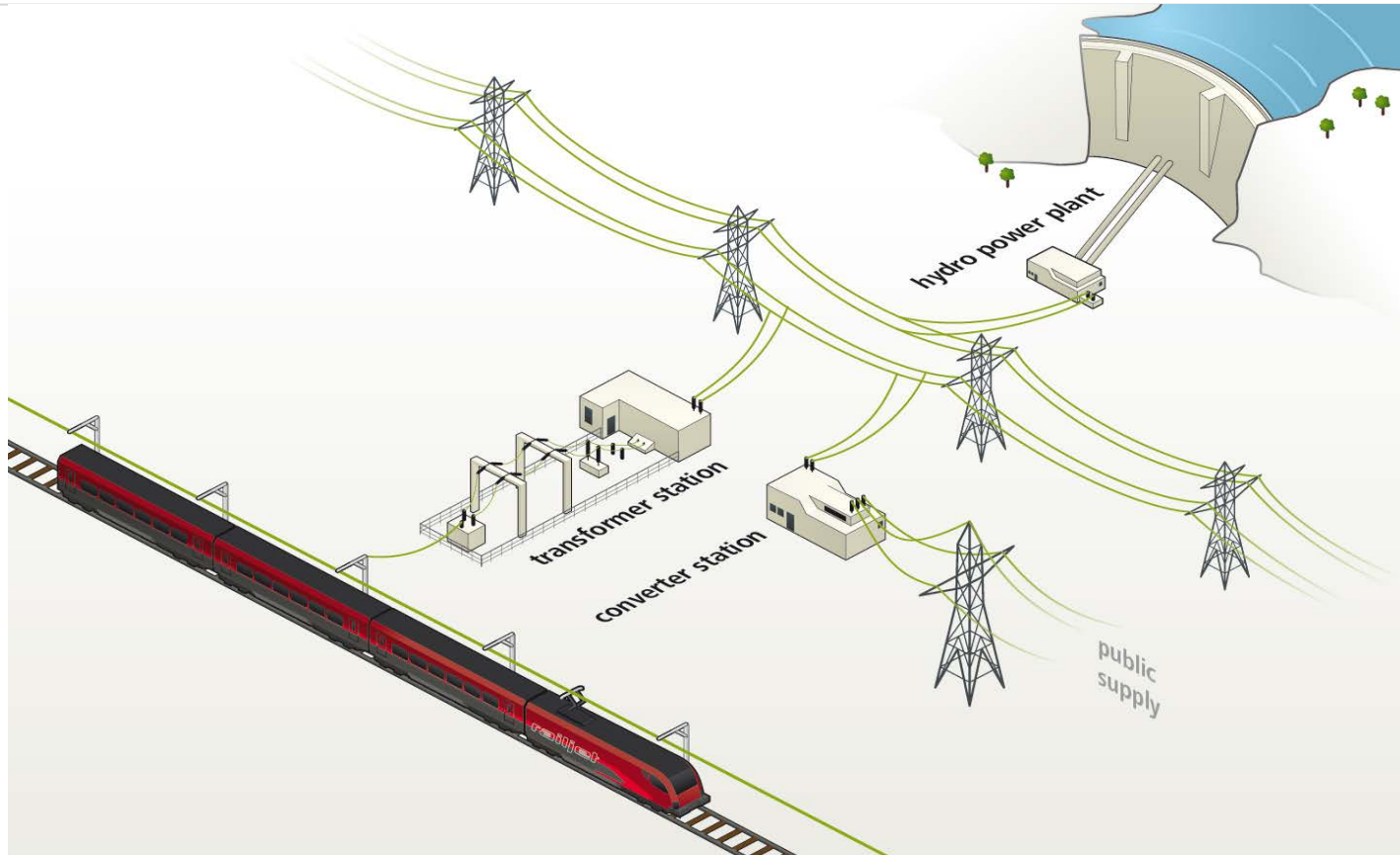
- Own generation in power plant Lassach
- Generation in 16,7 Hz power plants
- Purchase from energy suppliers
- Own generation in power plant Rosenbach

**Purchase of natural gas and heat
380.307 MWh**



- Natural gas
- Heat

Principle of 16.7 Hz traction power supply



Projects for increasing production capacity

Hydro power plant
Tauernmoos

1

Hydro power plant
Reconstruction penstock

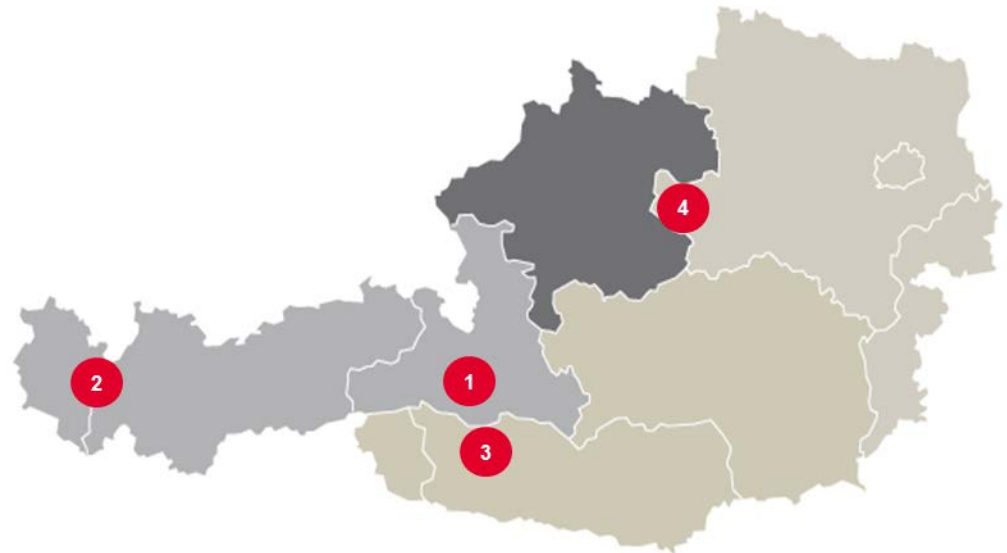
2

Hydro power plant
Obervellach II

3

Photovoltaik power plant
in process of planning

4



In line with the environment

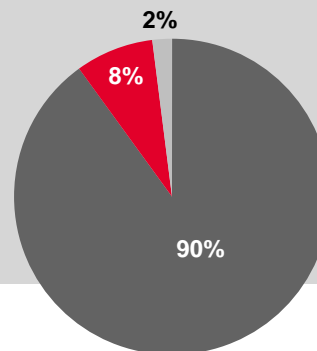
We are in line with the environment through:

- Increase in **energy efficiency in traction power supply**
- Intact **flora and fauna** in the vicinity of our facilities,
- Operational **energy management**,
- Measurement and reporting of the **environmental activities**, and
- Placing of **CSR measures** in the vicinity of our facilities.

The good CO₂ balance of public rail traffic is based on the sources of traction power.

The customary traction power mix (see chart) already comprises a high share of renewable energy.

Additionally, **CO₂ free traction power** generated from **100% renewable energy** and additional compensation of upstream CO₂ emissions is offered.



Traction power mix 2012

■ Hydro Power ■ Natural gas ■ Environmental friendly energy



Through the generation mix of traction power, annually more than 3 million t of CO₂ can be saved

Innovations – knowledge – further development

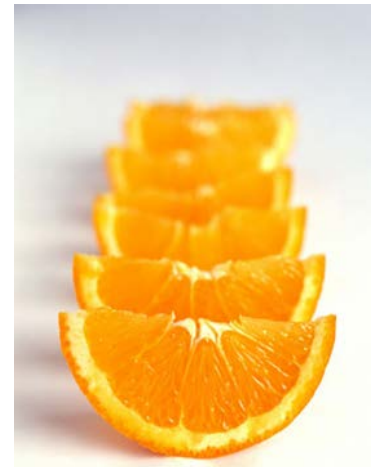
Idea and knowledge management for maximum innovation strength



Acquiring and maintaining know-how in traction current supply

Development towards energy service provider and energy supplier for trains in Europe

Commitment to comprehensive employee protection and workplace health promotion



Selected, efficient communication within the business unit

Future-oriented training and further training of the individual employees

Our customers & partners

We supply our customers in a non-discriminating way and offer numerous services for

- railway traffic and railway infrastructure enterprises,
- lessees on railway area,
- industry customers, and
- the entire ÖBB group.



City Air Terminal Betriebs GmbH - Deutsche Bahn AG - Graz-Köflacher Bahn - GYSEV Zrt. - Linzer Lokalbahn AG - Cargo Service GmbH. - Lokomotion GmbH - LTE - Montafonerbahn AG - ÖBB - Rail Cargo - RTS GmbH - Salzburg AG - Steiermarkbahn GmbH - Steiermärkische Landesbahnen - Stütz Rail Professionals GmbH - T-Mobile Austria GmbH - TX Logistik GmbH - Westbahn Management GmbH - Wiener Lokalbahnen AG - Wiener Lokalbahnen Cargo AG - A1 Telekom AG - Billa AG - Bipa GmbH - Der Bäcker Ruetz GmbH - Hutchinson 3 G GmbH - Karl Schmelzer GmbH - Mc Donald's - MPREIS GmbH - Mungos GmbH - Secret Factory GmbH - Selecta GmbH - SPAR AG - Ströck GmbH - Weichenwerk Wörth GmbH - DB Energie GmbH - Siemens Industry Sector



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