

German "Energiewende"

Shared Project and Investment Opportunities in Germany's Capital Region Brandenburg

Supported by:

Federal Ministry for Economic Affairs and Energy

on the basis of a decision by the German Bundestag

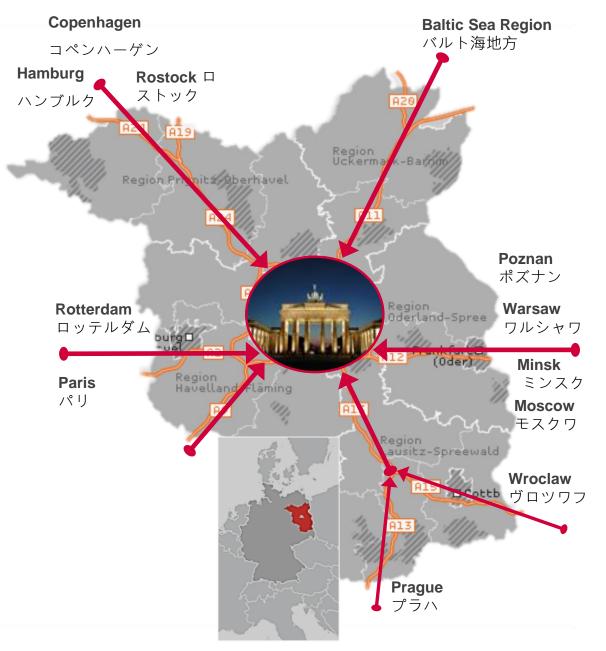
Federal Government Commissioner for the New Federal States

Focal point of European and German business

Brandenburg Invest | WFBB

Gateway between East and West

- More than 6 million inhabitants in Berlin-Brandenburg, more than Denmark, Norway or Finland
- Almost as large as Belgium
- 71% Services Industries,
- 26 % Manufacturing
- 3 % Agriculture
- Direct access to the emerging markets in Eastern Europe & Russia



Business Clusters in Berlin-Brandenburg

Life Sciences & Healthcare	Energy Technology	Optics	Mobility	ICT/Media/ Creative Industr.
Companies	Companies	Companies	Companies	Companies
app. 20,902	app. 6,318	app. 1,531	app. 17,589	app. 46,920
Employees	Employees	Employees	Employees	Employees
app. 368,373	app. 57,868	app. 17,688	app. 206,234	app. 261,071

International companies in Brandenburg





Higher education and first class research

Brandenburg Invest | WFBB



- More than 50 universities and colleges
- 45 Technology and start-up centers
- 100 research institutions
- 34 Nobel Prize winners



Manufacturing in Brandenburg

Japanese companies in the Capital Region



Proseat - Sekisui Chemicals, Brandenburg Takeda Pharma, Brandenburg Olympus Surgical, Brandenburg Nagase Group - Pactech Osaka Gas – Jacobs Carbons Yamaichi Manufacturing, Brandenburg TDK Sensors AG & Co. KG, Brandenburg e-shelter - NTT Group, Berlin Sony Corp., Berlin UNIQLO, Berlin JNC Corp. (Japan New Chisso), Berlin...

Manufacturing in Brandenburg Japanese institutions in the Capital Region



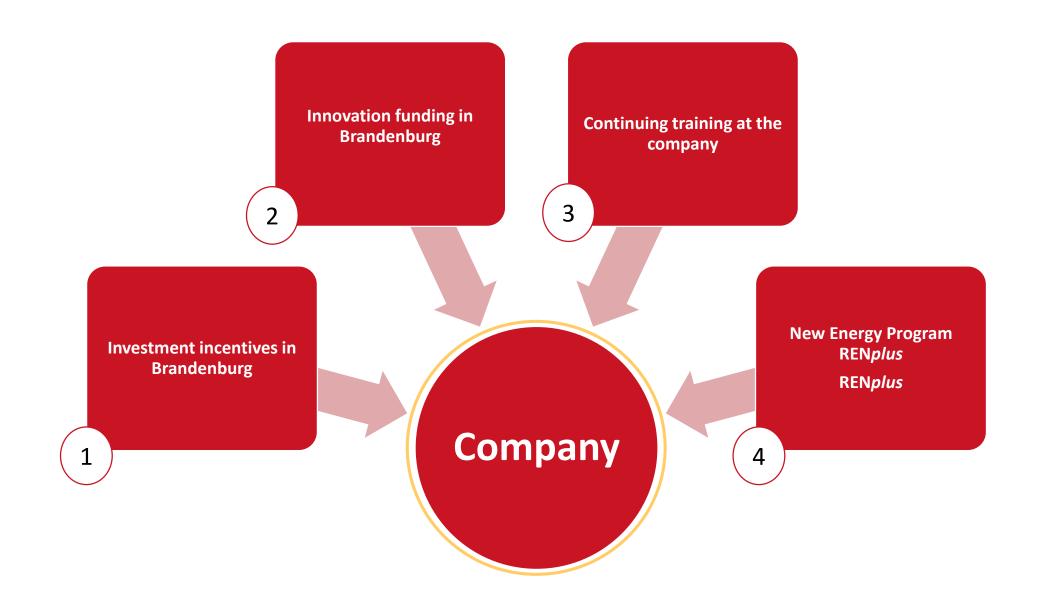


Japanese Embassy JETRO Berlin Japanese German Centre Berlin Japanese Industry and Trade Association Japanese International School Berlin A couple of highschools offering Japanese Courses

3.900 Japanese citizens are living in Berlin and Brandenburg

Incentive Programs for Companies

Brandenburg Invest | WFBB



Funding

GRW-G guidelines for large companies as applies to a BIG Corp.

Who can expect what amount of grants?

Large enterprises (LE):	10 % (20 %)
Medium sized enterprises (ME):	20 % (30 %)
Small enterprises (SE):	30 % (40 %)

Basic requirement for funding:

Establish a new manufacturing site in Brandenburg

or

Add a production line of a new product in Brandenburg

What will be funded?

Investment: Purchase of new fixed assets

or

Wages: Ex-post compensation for labour-cost expenditures

More Sources of Funding...

Federal Ministry for Economic Affairs and Energy



Announcement

3rd German-Japanese Call for Proposals for joint R&D projects

by Small and Medium-sized Enterprises (SMEs)

Deadline for proposal submissions: March 25th, 2019

1. Scope

Germany and Japan are announcing a Call for Proposals for joint R&D projects.

Applicants are expected to develop ready-to-market solutions for products, technology- based services or processes which have strong market potential.

The Ministry of Economy, Trade and Industry (METI) and the German Federal Ministry for Economic Affairs and Energy (BMWi) will provide access to public funding for joint projects provided by the Co-funding Program New Energy and Industrial Technology Development Organization (NEDO) and by the BMWi's Central Innovation Programme for SMEs (ZIM).

NEDO and BMWi (Coordinator: AiF Projekt GmbH) will provide all necessary assistance to project partners during project proposal, evaluation and monitoring phase.

NEDO and AiF Projekt GmbH will evaluate the submitted proposals and communicate the results within about 3 months after the call deadline.

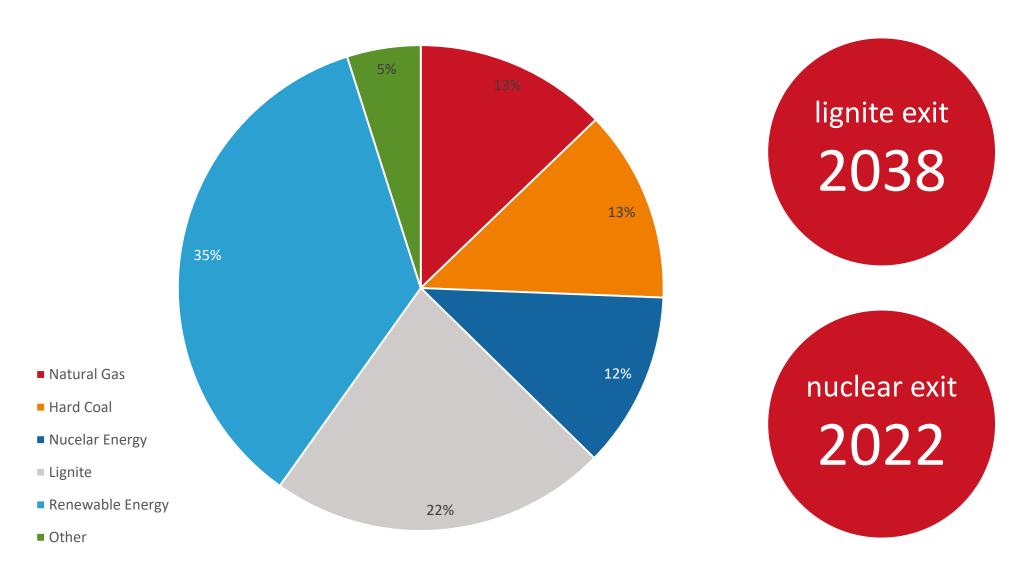
Topics

• Energy in Brandenburg

Energy in Germany

- Cluster Energy Technology Berlin-Brandenburg
- Energy strategy 2030 Brandenburg
- H₂ Initiative Brandenburg
- Regulatory Test Beds
- Structural Transformation Lausitz

Energy in Germany Electricity mix 2018



Source: https://www.unendlich-viel-energie.de/mediathek/grafiken/der-strommix-in-deutschland-2018

7. German Energy Research Program

- focus on "Regulatory Test Beds of the Energiewende" as a new subsidy column for the market preparation of innovative solutions
- reorientation towards cross-sector and cross-system
- improved integration of funding instruments
- closer international cooperation !

Energy research is to be funded with around € 6.4 billion from 2018 to 2022

(This corresponds to an increase of around 45 percent compared to the predecessor program in the comparison period 2013 to 2017)

Source: https://www.bmwi.de/Redaktion/DE/Artikel/Energie/Energieforschung/energieforschung-7-energieforschungsprogramm.html

Brandenburg combines traditional and renewable energy production

Lignite power plant Jänschwalde 3,000 MW 19.5 billion kWh in 2018

Lignite power plant Schwarze Pumpe 1,600 MW 11.6 billion kWh in 2018 3,700 wind turbines35,000 photovoltaic systems500 biomass systems41,000 heat pumps23,000 solar thermal systems

highest installed electric power from renewable energies per inhabitant in Germany: 1,355 kW(peak)

Source: www.leag.de & www.mwe.brandenburg.de

- 1. Final energy consumption is decreased by 23 %
- 2. Renewable energies account for 40 % of final energy consumption
- 3. Primary energy consumption is reduced by 20 %
- 4. Renewable energies account for at least 32 % of primary energy consumption

Cluster Energy Technology Berlin-Brandenburg

CLUSTER ENERGY TECHNOLOGY BERLIN BRANDENBURG

- more than 6,400 businesses
- almost 58,000 employees
- about 28,7 billion € total revenue
- a cluster management of 8 staff members
- Brandenburg and Berlin are working together





Cluster Chairman: Prof. Dr. Dr. h. c. Reinhard F. J. Hüttl



Brandenburg Invest | WFBB

Head of Clustermanagement: Klaus Henschke





Head of Clustermanagement: Wolfgang Korek

Brandenburg

Invest WFBB

Competition for ideas "Regulatory Test Beds of Energiewende"

The first call focuses on: (deadline April 2019)

- 1. Sector coupling and hydrogen technologies
- 2. Large-scale energy storage in the electricity sector
- 3. Energy-optimized neighborhoods

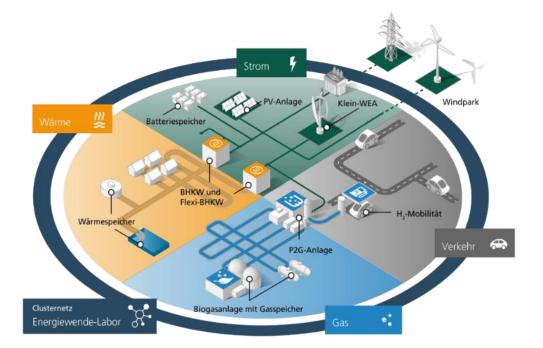
Requirements:

- 1. systemic dimension
- 2. tested on a relevant, industrial scale
- 3. socio-economic aspects and social issues
- 4. providing answers for market models, business models and regulatory regimes

Funding of up to € 400 million from 2019 to 2022

Regulatory Test Beds Energy transition lab Ketzin (Greater Berlin)



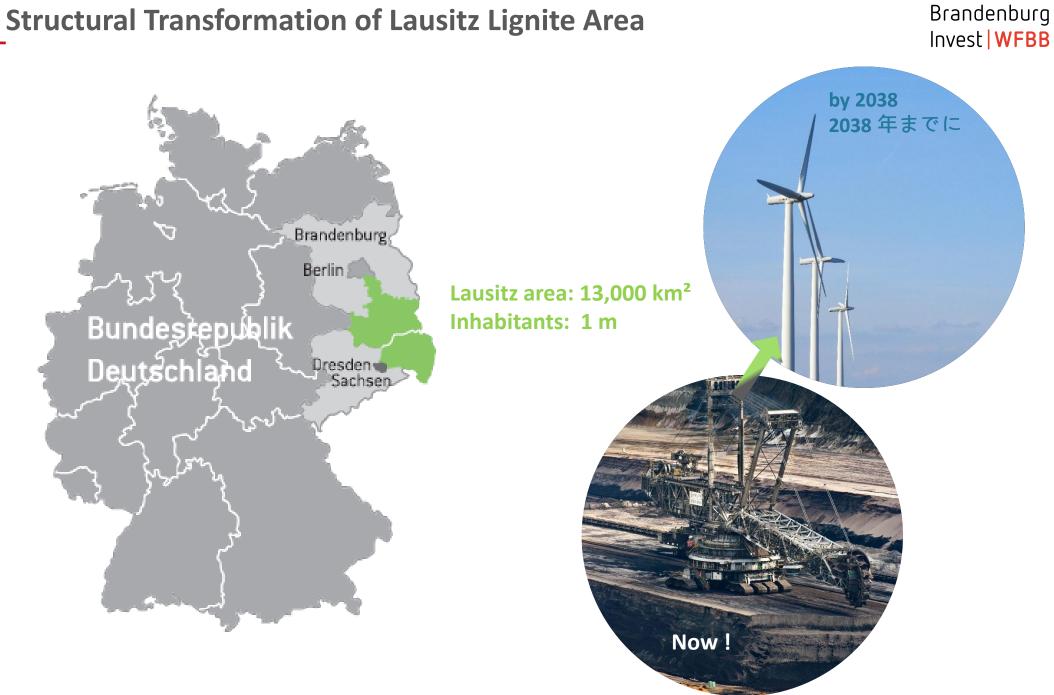


Intelligent, multi-dimensional cell of different technologies

- \rightarrow regenerative energy production
- \rightarrow energy transformation (P2X)
- \rightarrow energy storage

in connection with transport infrastructures (electricity, gas, heat)





Brandenburg Invest | WFBB

We are looking forward to a successful cooperation with you.

brandenburg-invest.com

Roald Koch, Director Foreign Direct Investment / Asia Electronics Industries, Energy Technologies T +49 331 – 730 61-214 M +49 174 9450893 E roald.koch@wfbb.de





Federal Government Commissioner

for the New Federal States

on the basis of a decision by the German Bundestag

These documents are intended for presentation purposes only. The content is protected by copyright. All rights to the presentation and its contents are entitled to the Brandenburg Economic Development Corporation (WFBB). The transfer to third parties as well as any reproduction, modification or other use and the use of the whole content or parts of it, requires the prior written agreement of the WFBB.