



Welcome to the 6th Working Group Meeting

Platform for Coal Regions in Transition

#CoalRegionsEU

Energy

Platform for Coal
Regions in Transition

Klaus-Dieter Borchardt

Deputy Director General, DG ENER



Annual Political Dialogue

Platform for Coal
Regions in Transition

Görlitz – 25-26 November 2019



Coal Regions in Transition Platform Annual Political Dialogue 2019



Welcome to the European City of Görlitz/Zgorzelec in Lusatia



Dr. Klaus Freytag, Representative of the Prime Minister for the Region of Lusatia

Hannes Koch, Policy Officer, State Chancellery of Saxony

Katja Müller, Project Manager, Wirtschaftsregion Lausitz GmbH

Coal Regions in Transition Platform Annual Political Dialogue 2019



Coal Regions in Transition Platform Annual Political Dialogue 2019



Görlitz – At a Glance:

- Sixth largest town of the Free State of Saxony with **56,000 inhabitants**
- **Germany's largest heritage area** with its **4000 listed buildings**
- One of the best reserved historic cityscapes all over Central Europe
- The town combines Lusatian and Silesian traditions as well as **German and Sorbian culture**.
- **Cross-border character:** It takes nothing but a short walk across the Old Town Bridge to reach the Polish twin city Zgorzelec.
- The sun rises over Germany in Görlitz first: **Görlitz is Germany's most eastern city.**



Coal Regions in Transition Platform Annual Political Dialogue 2019

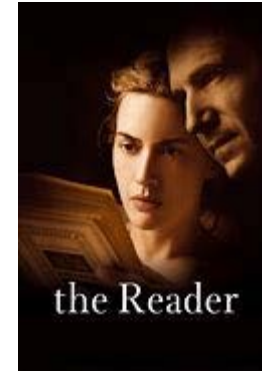


„Görliwood“ – The European film location of the decade

Many movie-makers have used the various sites as locations and film sets.

The city of Görlitz is fondly called „Görliwood“, because **more than 100 national and international films** have been produced there since the 1950-ies.

- Around the World in 80 Days (2004),
- The Reader (2009),
- Inglourious Basterds (2009),
- Monuments Men (2014) and
- Grand Budapest Hotel (2014)



Coal Regions in Transition Platform Annual Political Dialogue 2019



The Conference at the Wichernhaus

When: November 25th 2019, 10 a.m. till 5.30.p.m.

Where: Johannes-Wüsten-Str. 23a, 02826 Görlitz



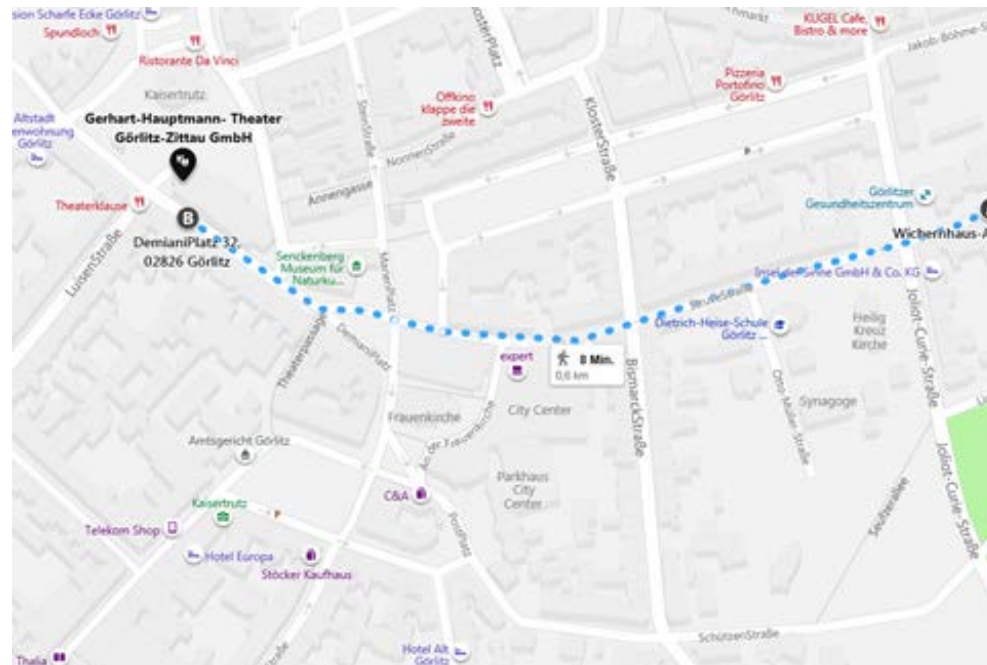
Coal Regions in Transition Platform Annual Political Dialogue 2019



Evening Reception at the Gerhart-Hauptmann-Theatre

When: November 25th 2019, 7 p.m. till 9.p.m.

Where: Demianiplatz 2, 02826 Görlitz



Nickname: “The Little Semper Opera House”

Coal Regions in Transition Platform Annual Political Dialogue 2019



The Lusatia Experience - Site Visits on November 26th 2019

- Study visit option 1: Sustainable Energy
- Study visit option 2: Research and Innovation
- Study visit option 3: Recultivation and Tourism
- Study visit option 4: Cultural Heritage and Industrial Culture
- Half-day visit option 1: Sustainable Energy
- Half-day visit option 2: Research and Innovation

Organized by the Wirtschaftsregion Lausitz GmbH



Coal Regions in Transition Platform Annual Political Dialogue 2019



We are looking forward to welcoming you in November 2019 in Görlitz!

- Conference and evening reception on November 25th 2019 in Görlitz
- Site visits on November 26th 2019 in Lusatia

It's time to register now!



[Download link to the promotion video](#)

Platform for Coal
Regions in Transition

Recent developments in EU transition



Forum of Mayors on Just Transition

Climate Ambition and Just Transition Hand in Hand



WWF Asks on Climate Ambition and Just Transition

1. More climate ambition in mid- and long-term EU targets
2. Just Transition crucial on the way to a climate neutral economy
3. Participation rules for the transition have to be applied
 - 7 Golden Rules on Just Transition Planning

Supported by:



Federal Ministry
for the Environment, Nature Conservation
and Nuclear Safety



European
Climate Initiative
EUKI



Forum of Mayors on Just Transition

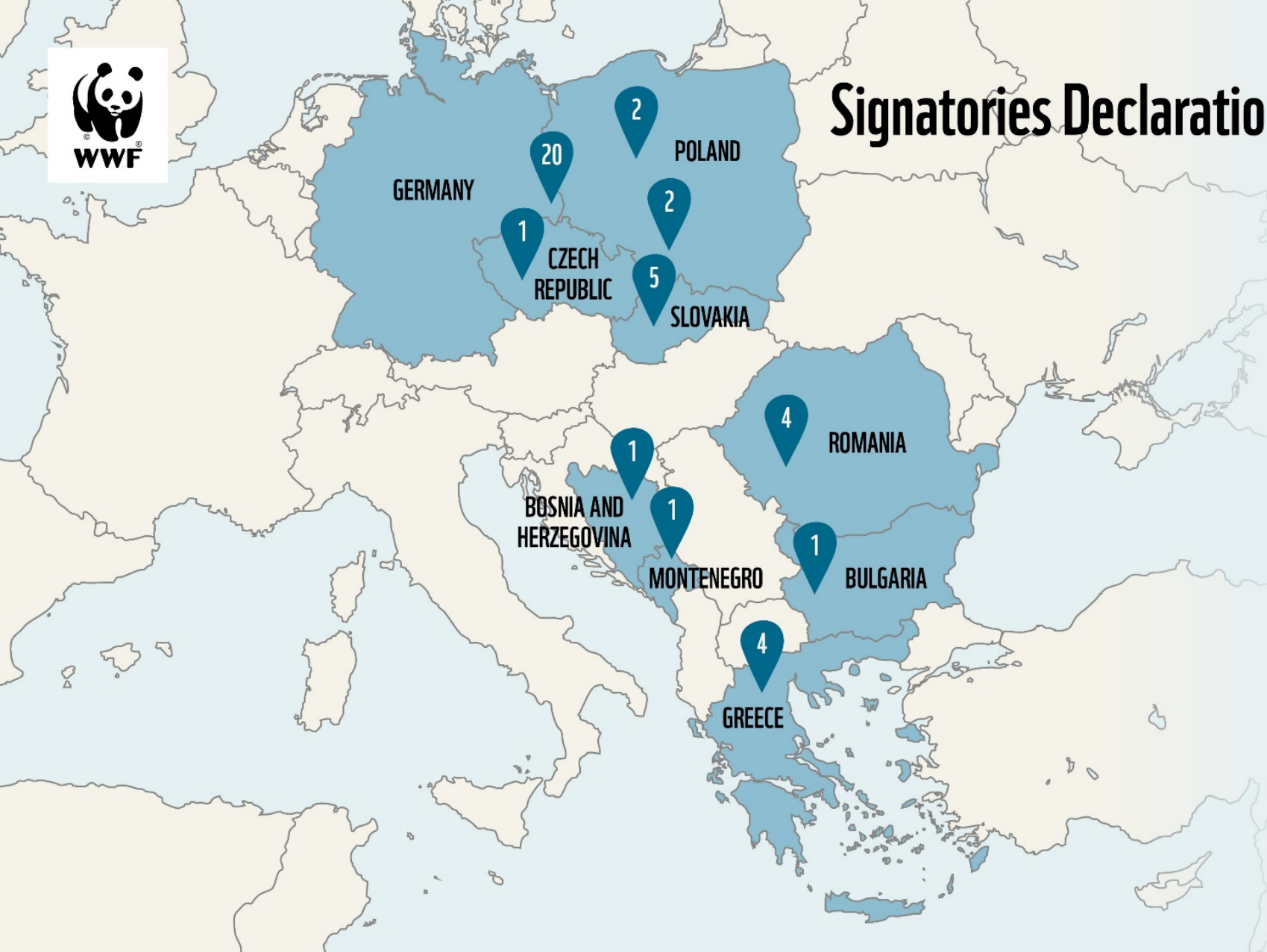
- Mayors' initiative supported by WWF
- Two Forums of Mayors: Kozani (2018) and Weisswasser (2019)
- Open to all mayors from coal regions (EU & Energy Community)
- Main objectives:
 - networking between mayors;
 - learning from the lessons in other European coal regions;
 - forging a stronger voice at EU level, incl. on funding opportunities;
 - overcoming regional differences in the countries on the coal phase-out

Supported by:





Signatories Declaration of Mayors on Just Transition



Bosnia and Herzegovina:

Lukavac

Bulgaria:

Bobov Dol

Czech Republic:

Litvínov

Germany:

Weißwasser/O.L., Boxberg/O.L., Spremberg, Lauta, Peitz, Vetschau, Großräschen, Schenkendöbern, Kleine Elster, Lohsa, Welzow, Guben, Kolkwitz, Burg, Groß Düben, Schleife, Trebendorf, Rietschen, Groß Schacksdorf-Simmersdorf, Forst

Greece:

Amyntaio, Florina, Eordaia, Kozani

Montenegro:

Pijevlja

Poland:

Bytom, Konin, Kleczew, Gliwice

Romania:

Petrila, Aninoasa, Petrosani, Lupeni

Slovakia:

Prievidza, Bojnice, Handlová, Nováky, Partizánske

© WWF Germany, 10/2019



Declaration of Mayors on Just Transition

- Acknowledgement of Europe's commitment to the Paris Agreement and the long-term vision for a climate neutral economy by 2050
- Guiding principles:
 - national governments to engage in transparent and inclusive dialogue with all regional stakeholders in coal regions in order to prepare transition plans
 - importance of the role of local communities
 - importance of transparency and consultation with local governments in the Coal Platform
 - capacity building and financial support for just transition is key, incl. Just Transition Fund

Supported by:





Czech Context

- Coal commission established in July 2019 (first results expected end of 2020)
 - Main goals:
 - Coal phase-out final date including all the necessary steps
 - Energy self-sufficiency (energy security, industry competitiveness)
 - Composition:
 - Chaired by minister of industry and minister of environment
 - Consist of various experts (industry, climate, trade unions, members of parliament, regional stakeholders, etc.)

Supported by:





Czech Context

- Governmental program RESTART for structurally affected regions (since 2017)
 - A complex list of measurements
 - Includes several pillars (education, research and development, environment, etc.)
 - 3 regions (Ústí region, Karlovy Vary region, Moravskoslezský region)
 - Example of an aid: grants for brownfields, revitalisation of forests in mountains, health infrastructure support
 - National support is welcomed but we need also help from EU (funds)

Supported by:





German Context

- Coal Commission has decided on a coal phase-out for lignite and hard coal in 2038 the latest (with an option of 2035)
- New law on structural development:
 - 40bn Euros over a period of 20 years for the three German lignite regions
 - Focus: development of infrastructure and economic diversification for a number of concrete projects

Supported by:



Federal Ministry
for the Environment, Nature Conservation
and Nuclear Safety



European
Climate Initiative
EUKI



Main asks from the “Lausitzrunde” (Lusatian mayors)

- Securing funds until 2038 through a treaty between the Federal Government and the Länder (State Treaty)
- Sufficient financial support of the municipalities by the federal government/federal states (own funds)
- Focus of the support should be put on coal regions because they are specifically affected by the transition
- Strengthening existing enterprises and supporting the creation of new jobs in industry.

Supported by:





Thank you for your attention

Kamila Blahova, Mayor of Litvinov, kamila.blahova@mulitvinov.cz

Torsten Pöttsch, Mayor of Weisswasser, stadt@weisswasser.de

Juliette de Grandpré, Senior Policy Advisor Climate & Energy, WWF Germany,
juiette.degrandpre@wwf.de

For more information on the Forum of Mayors on Just Transition, please contact Juliette de Grandpré



Federal Ministry
for Economic Affairs
and Energy

The “Structural Strengthening Act“

Implementing the recommendations of the German Commission on Growth, Structural Change and Employment

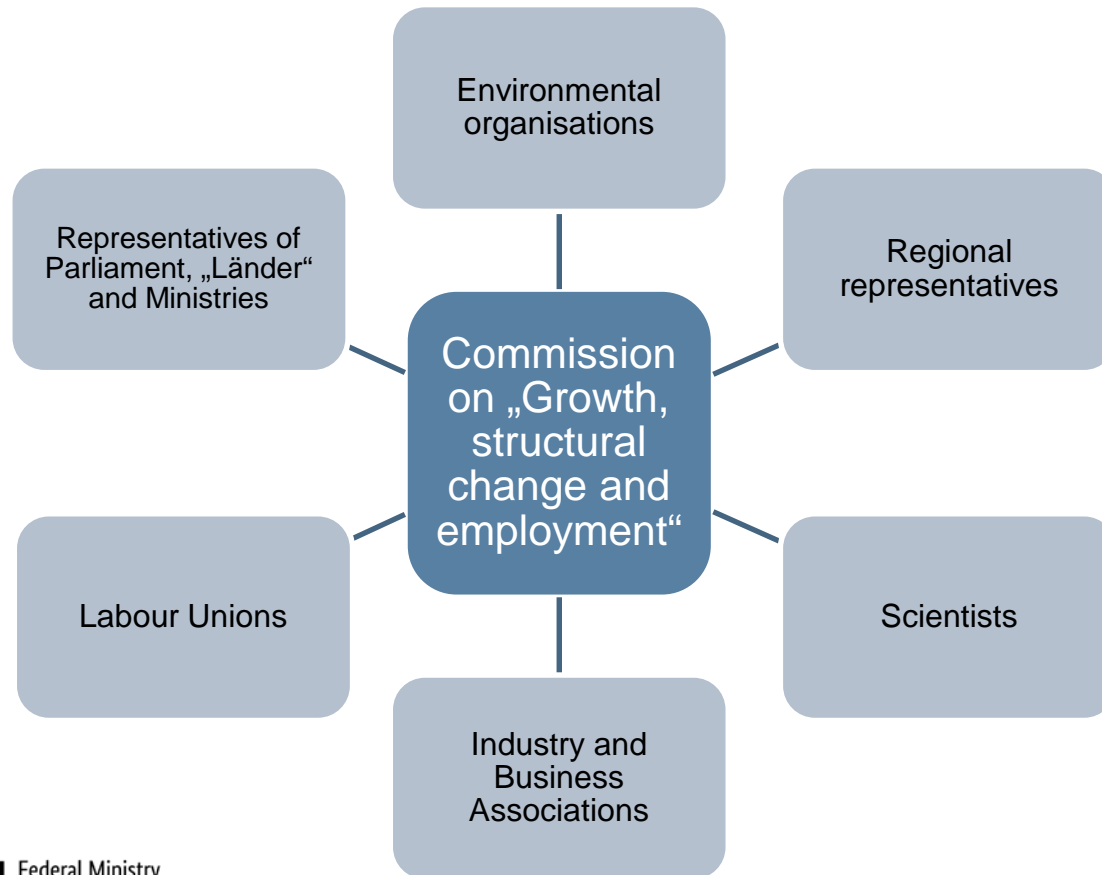
Brussels, Monday October 16th, 2019

Dr. Raphael L’Hoest

Deputy Director General Economic Policy

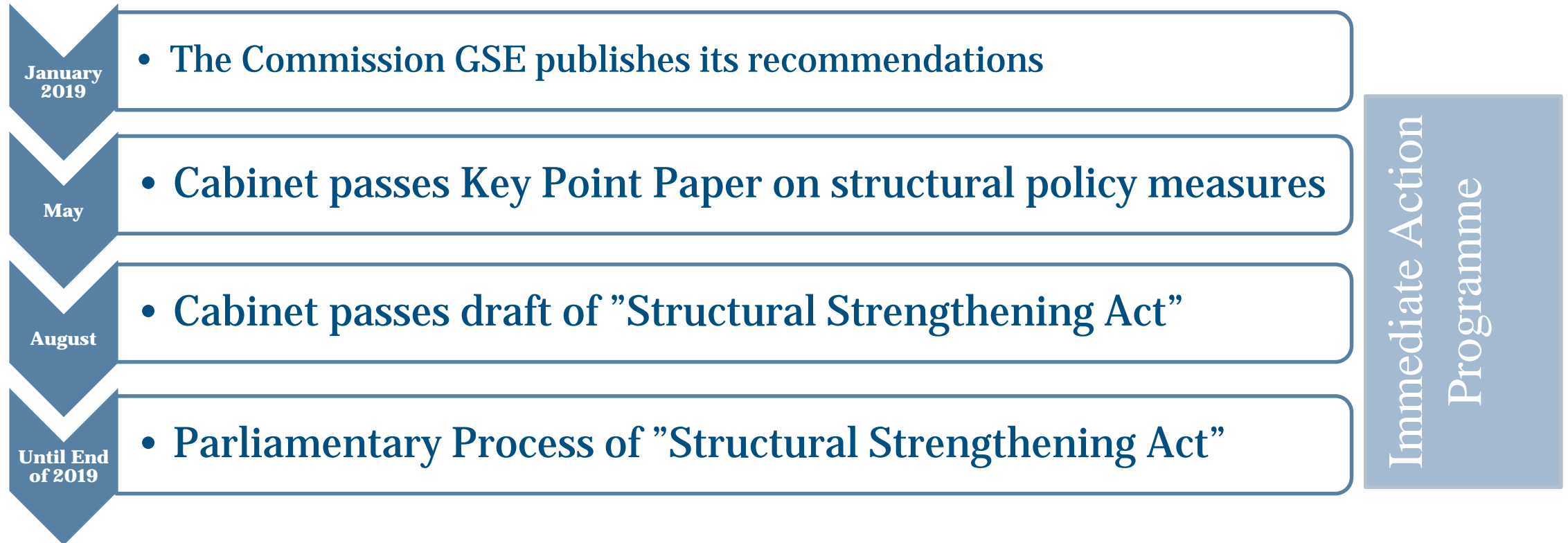
Federal Ministry for Economic Affairs and Energy

Commission on Growth, Structural Change and Employment

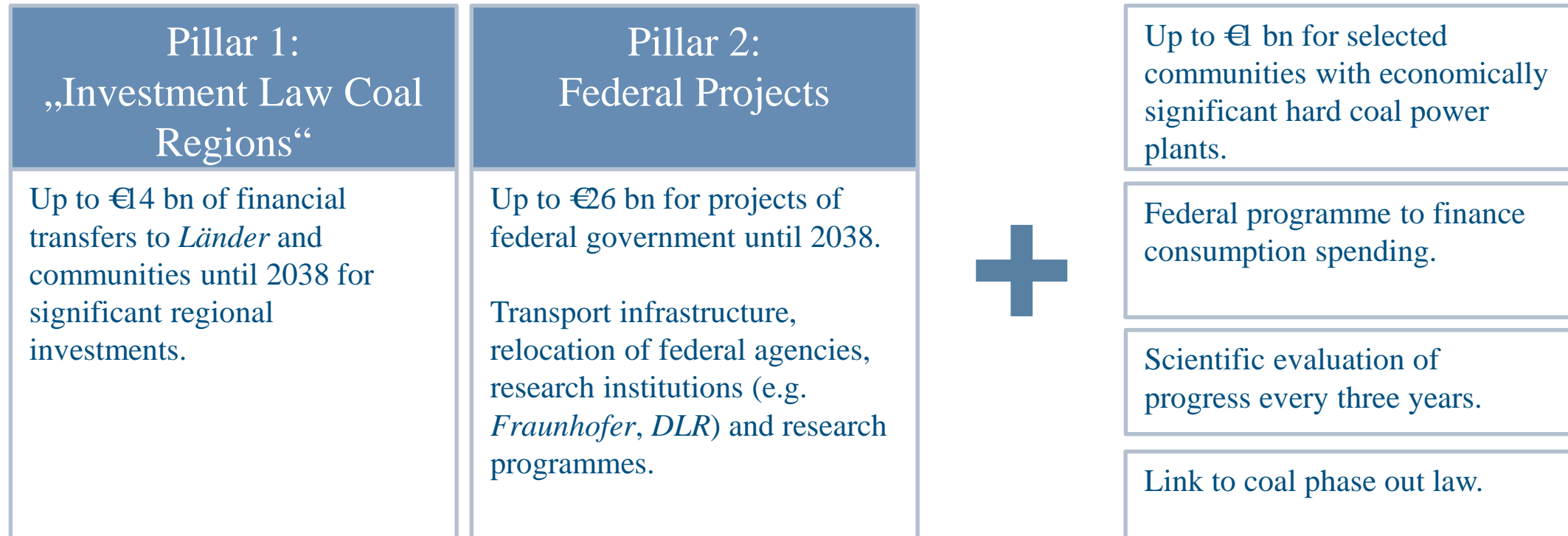


- ✓ 9 months of intensive work
- ✓ 24 members with voting rights
- ✓ On-site inspection of the affected regions
- ✓ 10 plenary meetings
- ✓ Further meetings in two sub-working groups on structural change and energy-related topics
- ✓ Expert-hearings on various topics

A short timeline of the process



The “Structural Strengthening Act“



Thank you for your attention

Dr. Raphael L'Hoest
Deputy Director General Economic Policy
Federal Ministry for Economic Affairs and Energy

Platform for Coal
Regions in Transition

Coffee break

10.15 – 10.45

Platform for Coal
Regions in Transition

International perspectives

10.45 – 12.00



WHEN THE SUN RISES
WE WORK HARD TO DELIVER

Just Energy Transition in Mpumalanga Province in South Africa

Working Group Platform on Coal Regions in Transition

October 2019



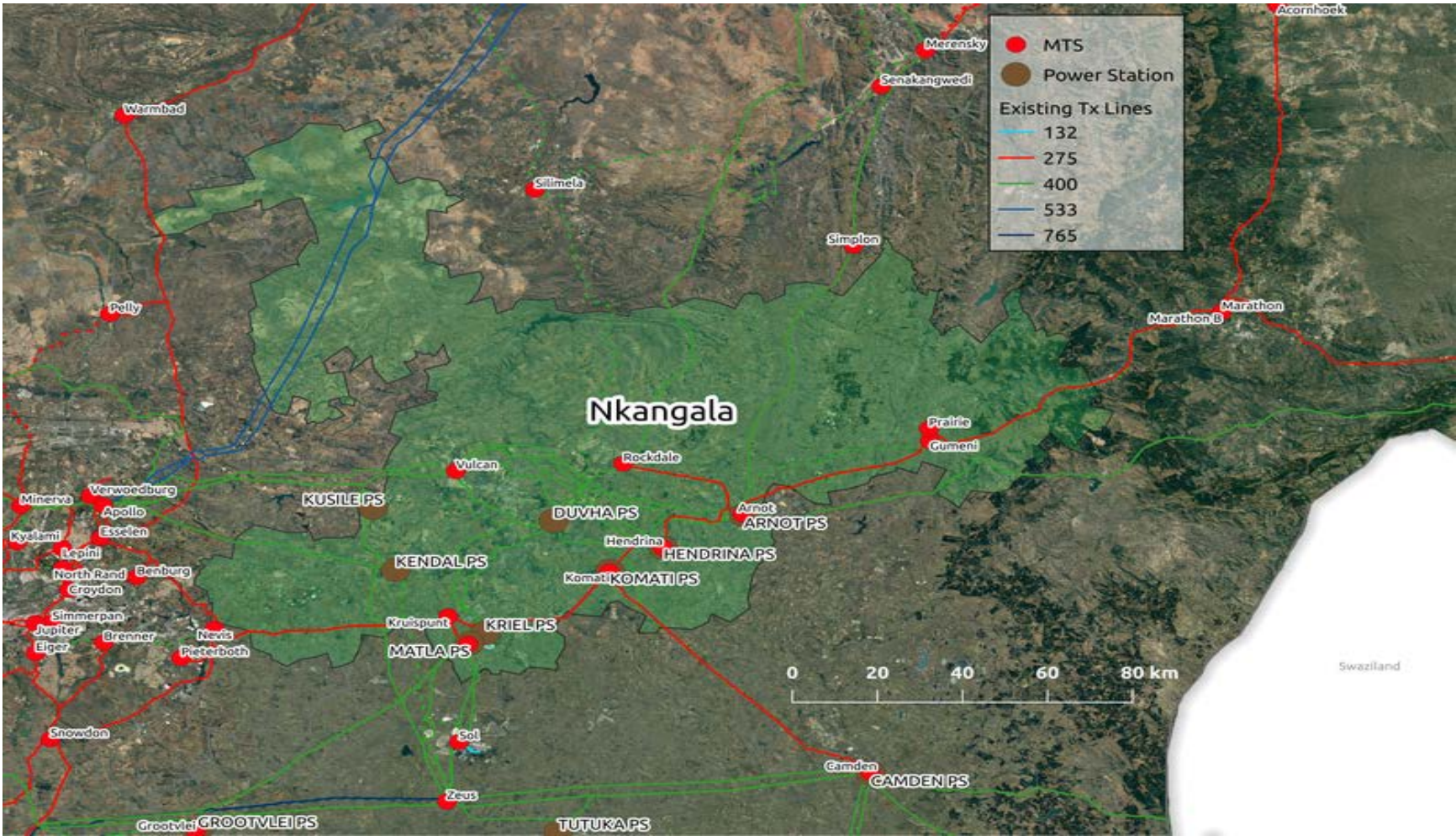
Legal Framework

- Constitution SA , 1996
- National Development Plan Vision 2030
- Mpumalanga Vision 2030
- Mpumalanga Growth & Development Path
- Mpumalanga Green Economic Development Plan
- Mpumalanga Climate Change Adaptation Strategy
- Mpumalanga Climate Change Mitigation Strategy (in progress)

Energy Transition Global Trends – 5Ds

- ✓ Decarbonisation
- ✓ Decentralisation
- ✓ Democratisation
- ✓ Digitisation
- ✓ Disruptor Technologies

Nkangala Economic Baseline Assessment



Why assess the Nkangala Economic Baseline?

- The Nkangala District region is home the bulk of power stations and coal mines in South Africa. This poses a great threat to the regional economy if these stations were to close due to decommissioning

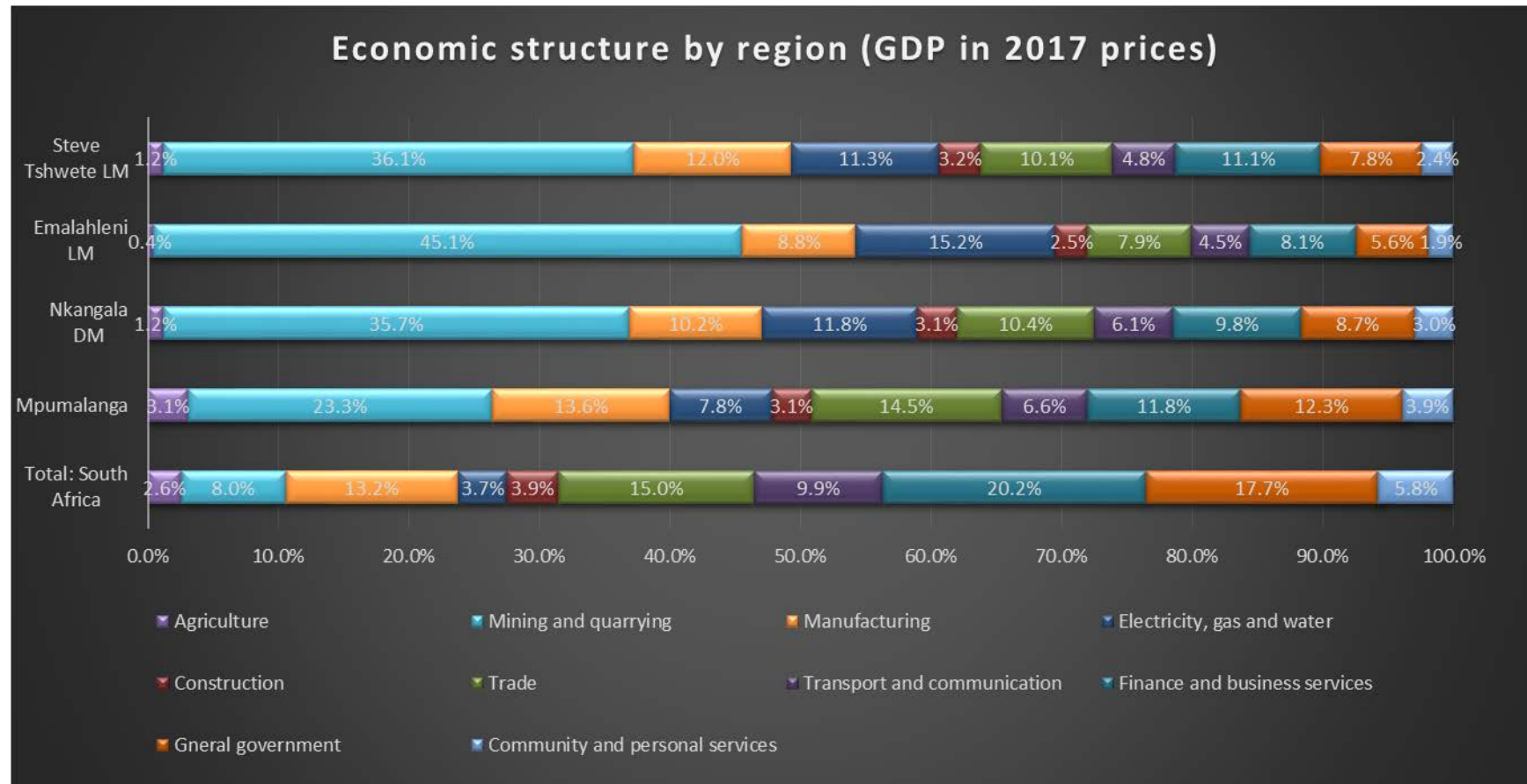
Power station	Technology	Status	Installed capacity MW	Decomissioning date
Arnot	Coal	existing	2220	2025-2029
Duvha	Coal	existing	3480	2030-2034
Hendrina	Coal	existing	1900	2021-2027
Kendal	Coal	existing	3840	2038-2043
Komati	Coal	existing	900	2024-2028
Kriel	Coal	existing	2880	2026-2029
Matla	Coal	existing	3480	2029-2033

Coal Fleet Decommissioning Plan

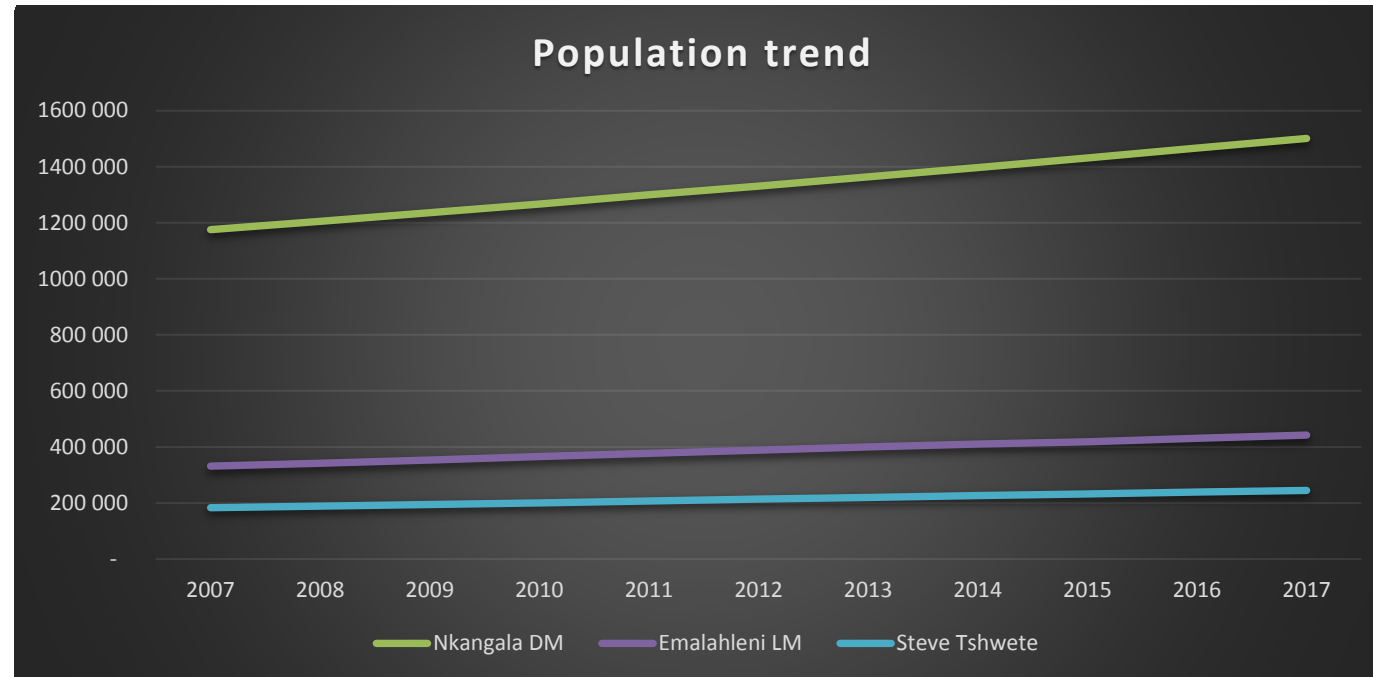
- ✓ The scenarios outlined in the IRP 2018 show little to no investment in further coal fired generation
- ✓ The plan also indicates a decommissioning schedule for the existing fleet due to its age

Year	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
MW Decommissioned	900	700	600	400	900	1600	1400	1900	1900	2300

Baseline profile for Nkangala District Municipality



Baseline profile for Nkangala District Municipality

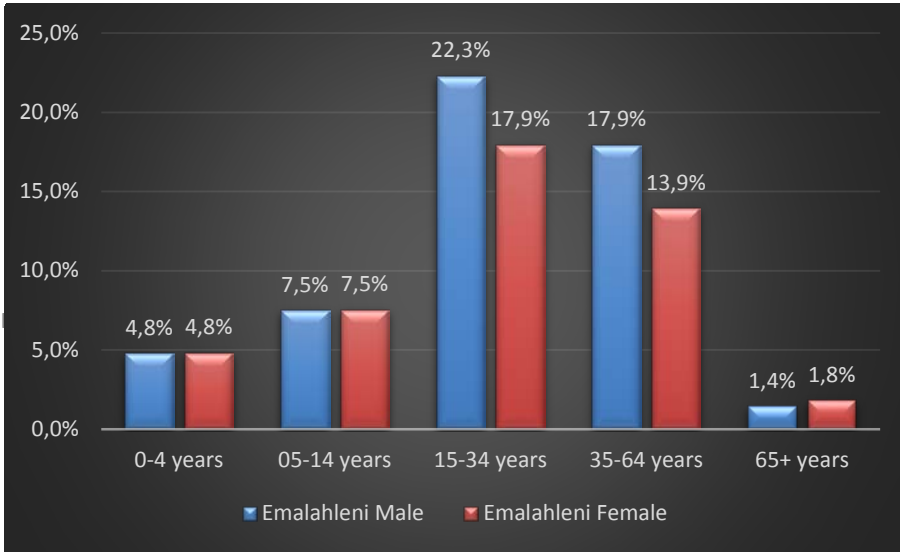
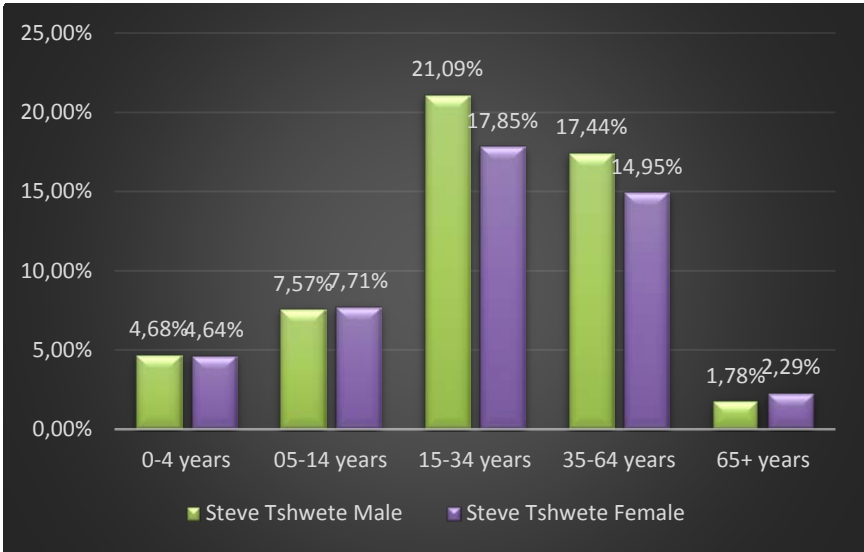


Over 1.5 million people live in the Nkangala District Municipality as of 2017

The district and local municipalities have shown a compound annual growth rate of 2.5% over the period 2007-2017

Baseline profile for Nkangala District Municipality

Demographics

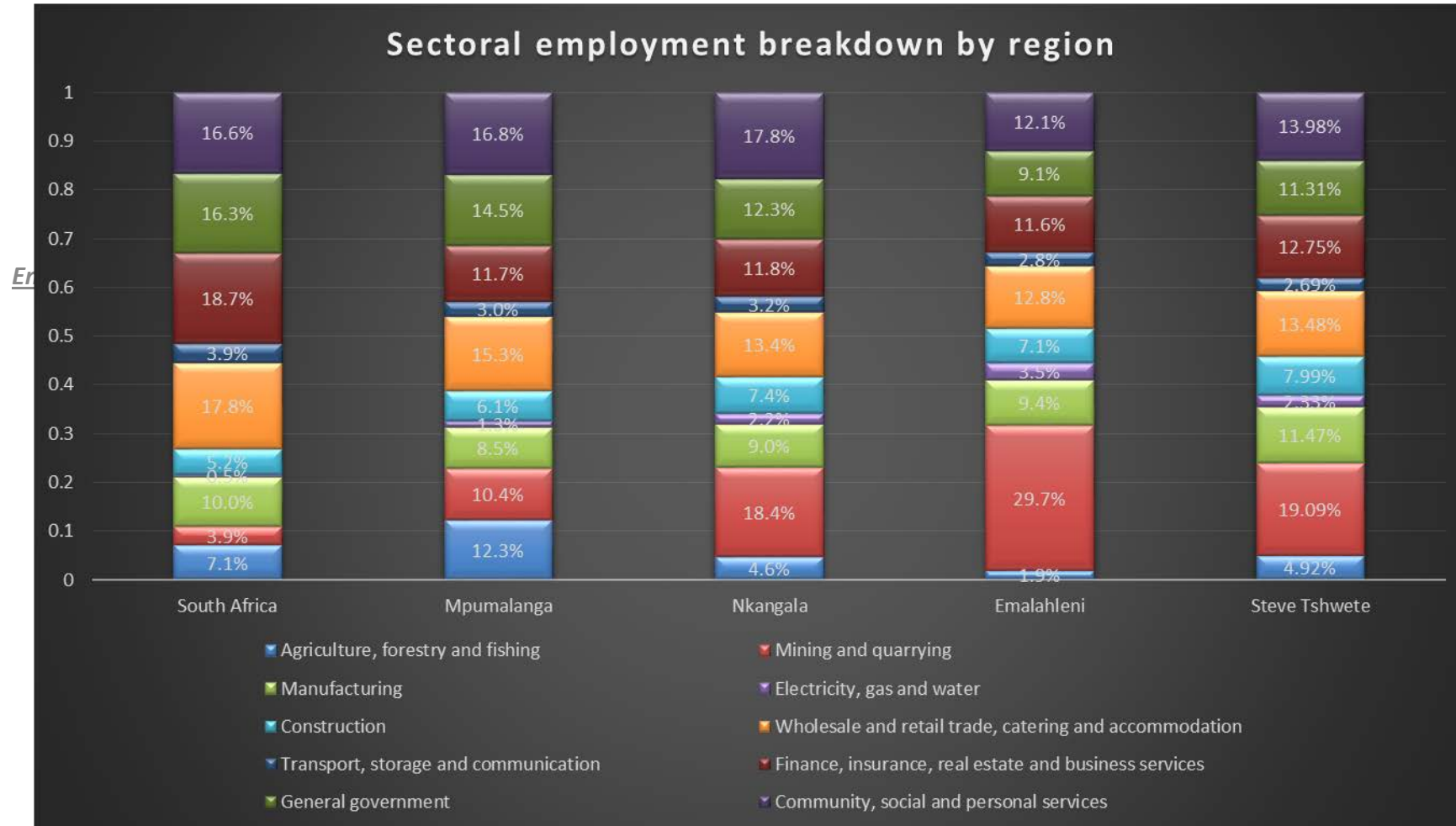


Baseline profile for Nkangala District Municipality

- ✓ Employment
- ✓ Over 1 million people are of working age and living in the district municipality.
- ✓ About 40% of these individuals are employed in the DM
- ✓ The unemployment rate of the DM stands at 32%
- ✓ The remaining 28% are not economically active
- ✓ The same trend can be seen within the Emalahleni and Steve Tshwete LM's

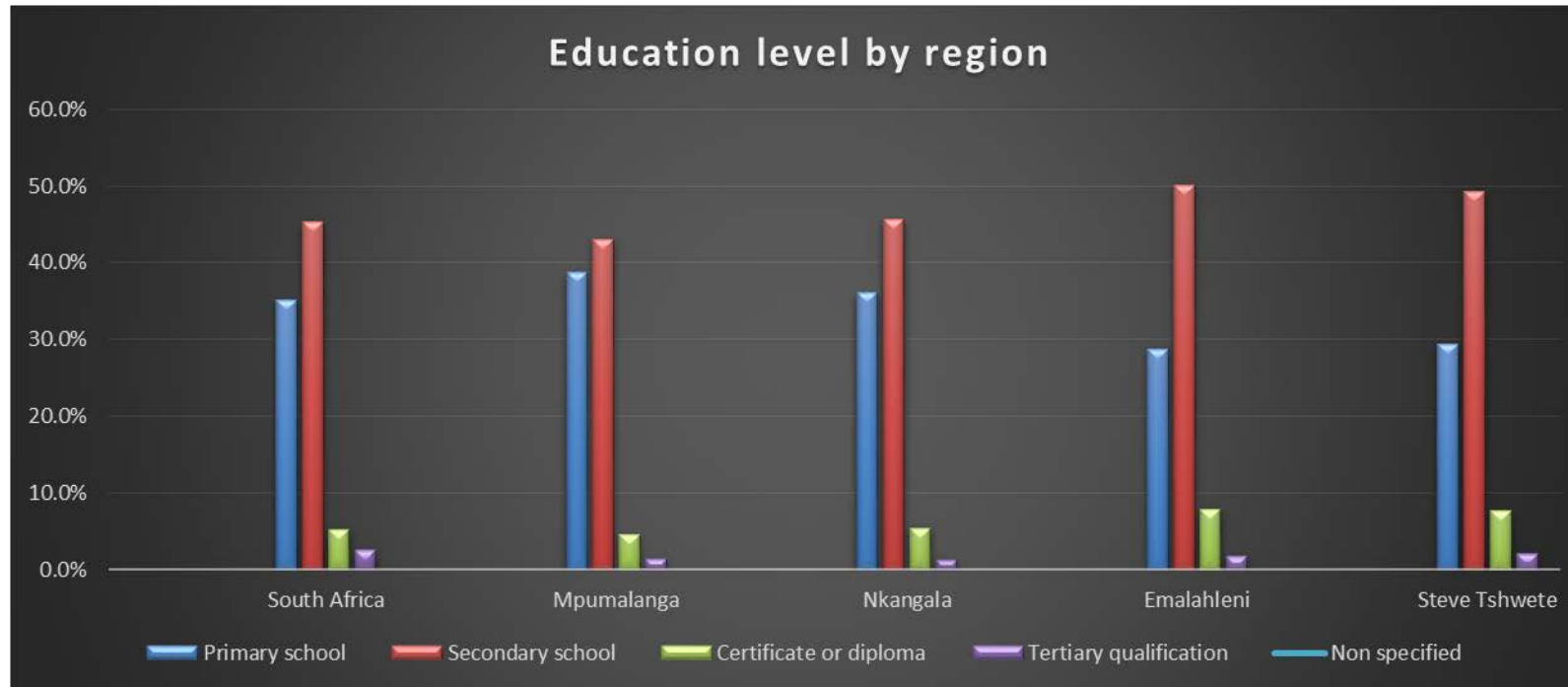
	Emalahleni	Steve Tshwete
Population: Working age	319 437	174 974
Employed %	49 %	54 %
Not economically active	22 %	25 %
Unemployment rate	29 %	21 %

Baseline profile for Nkangala District Municipality



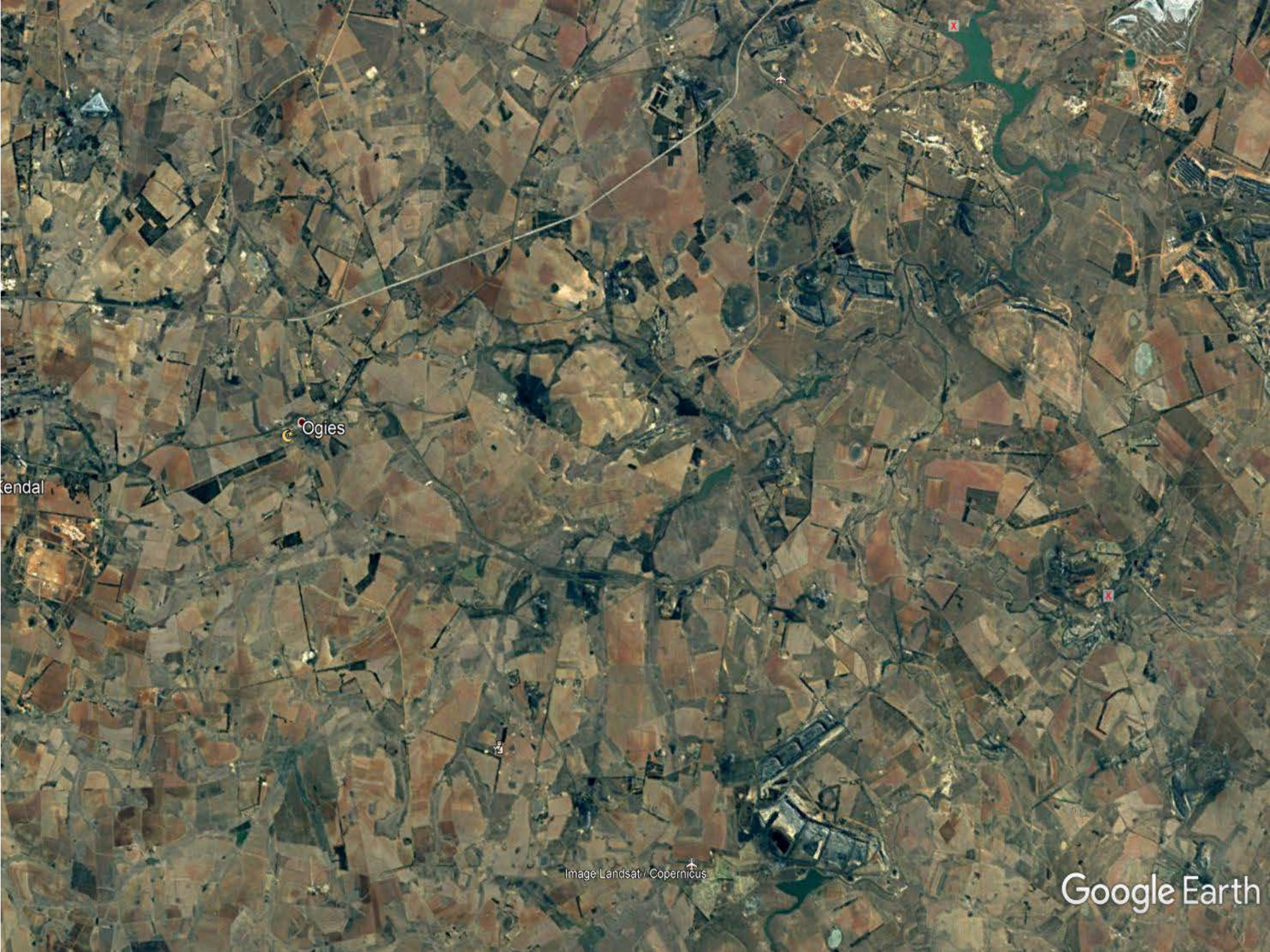
Confidential

Baseline profile for Nkangala District Municipality



Education

The district and local municipalities have higher levels of secondary and diploma graduates when compared to provincial and national averages



endal

Ogies

Image Landsat / Copernicus

Google Earth



endal

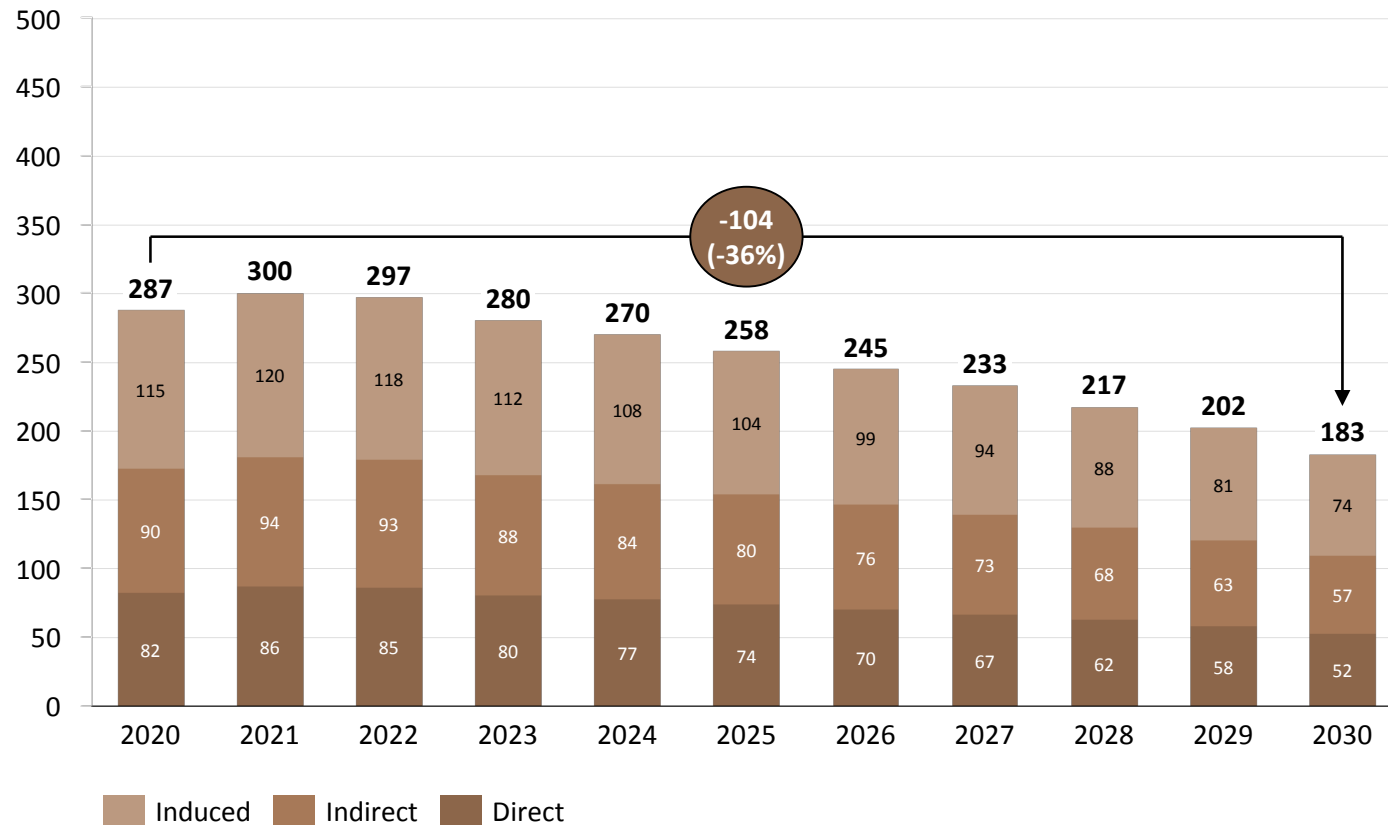
Ogies

Image Landsat / Copernicus

Google Earth

Net job losses in coal overall of $\approx 100\text{k}$, direct jobs in coal shifting from $\approx 80\text{k}$ in 2016 to $\approx 50\text{k}$ by 2030

Jobs (net)
(construction + operations)
['000]

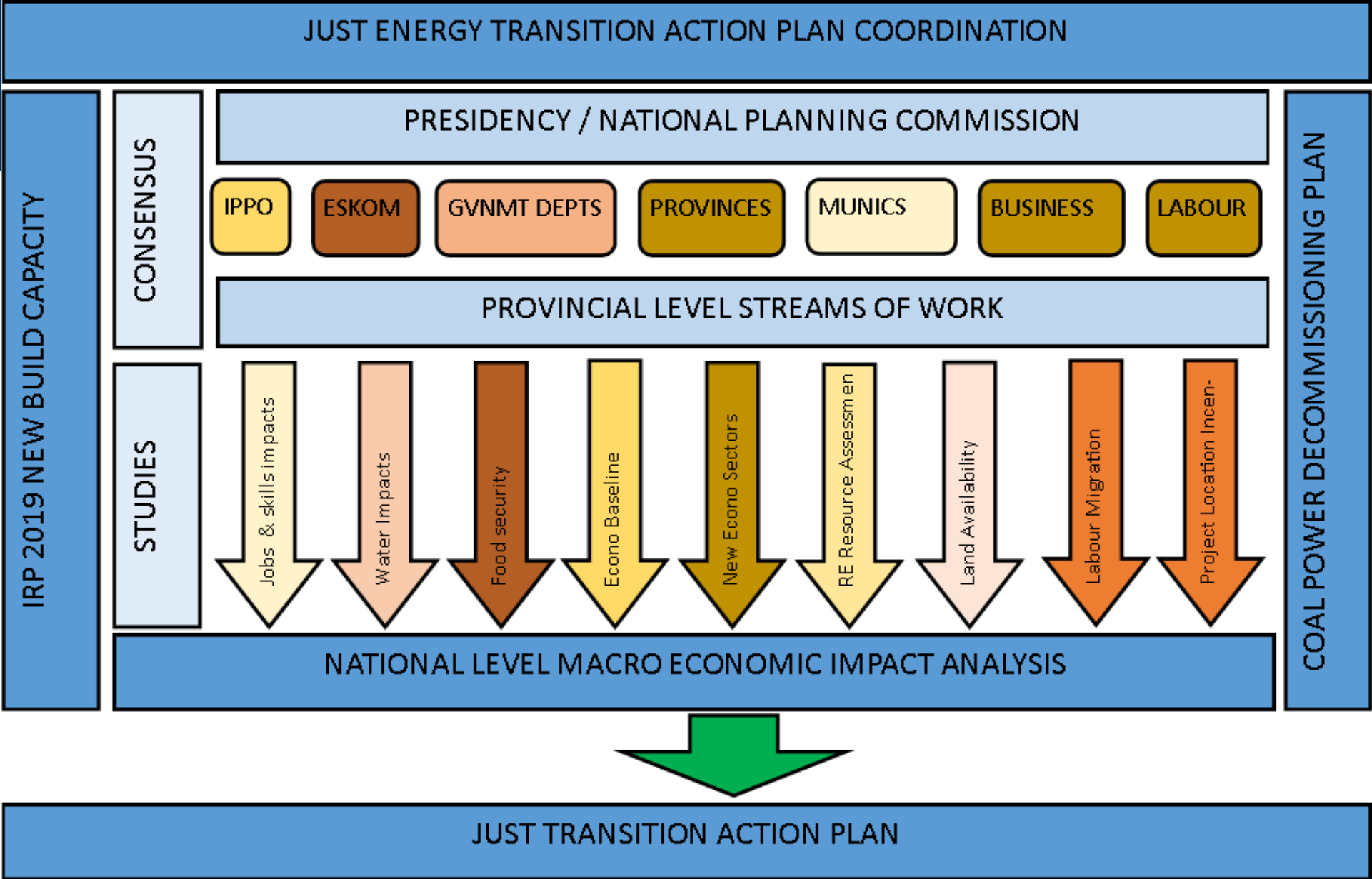


DoE
Recommended
Plan (to 2030 only)

Sources: Draft IRP 2018; CSIR Energy Centre analysis
Note: Job potential includes direct, indirect and induced jobs

Challenges on Energy Transition

- ✓ Losses on Region Economic activities
- ✓ Losses in jobs and opportunities in mining and power sectors
- ✓ Labour migration
- ✓ Negative socio-economic impacts
- ✓ Losses of existing skills and lack skills required for new industry
- ✓ Lack of change of policies to include Renewables
- ✓ Limited Economic Diversification





THANK YOU
DANKIE
REA LEBOHA



NDOLIVHUAA
ENKOSI

HI NKHENSILE
SIYATHOKOZA
SIYABONGA

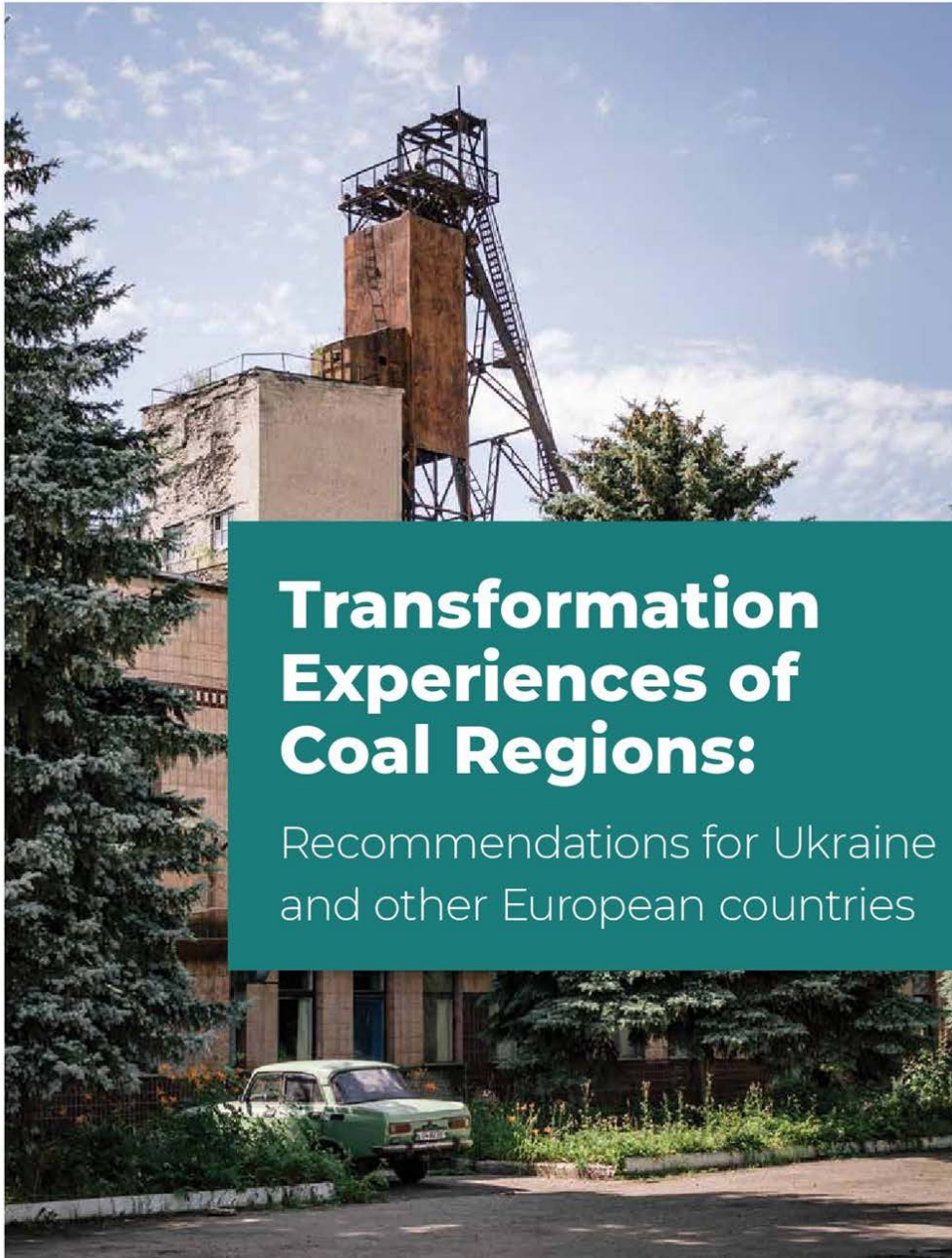


Transformation Experiences of Coal Regions: Recommendations for Ukraine and other European countries

Kostiantyn Krynytskyi

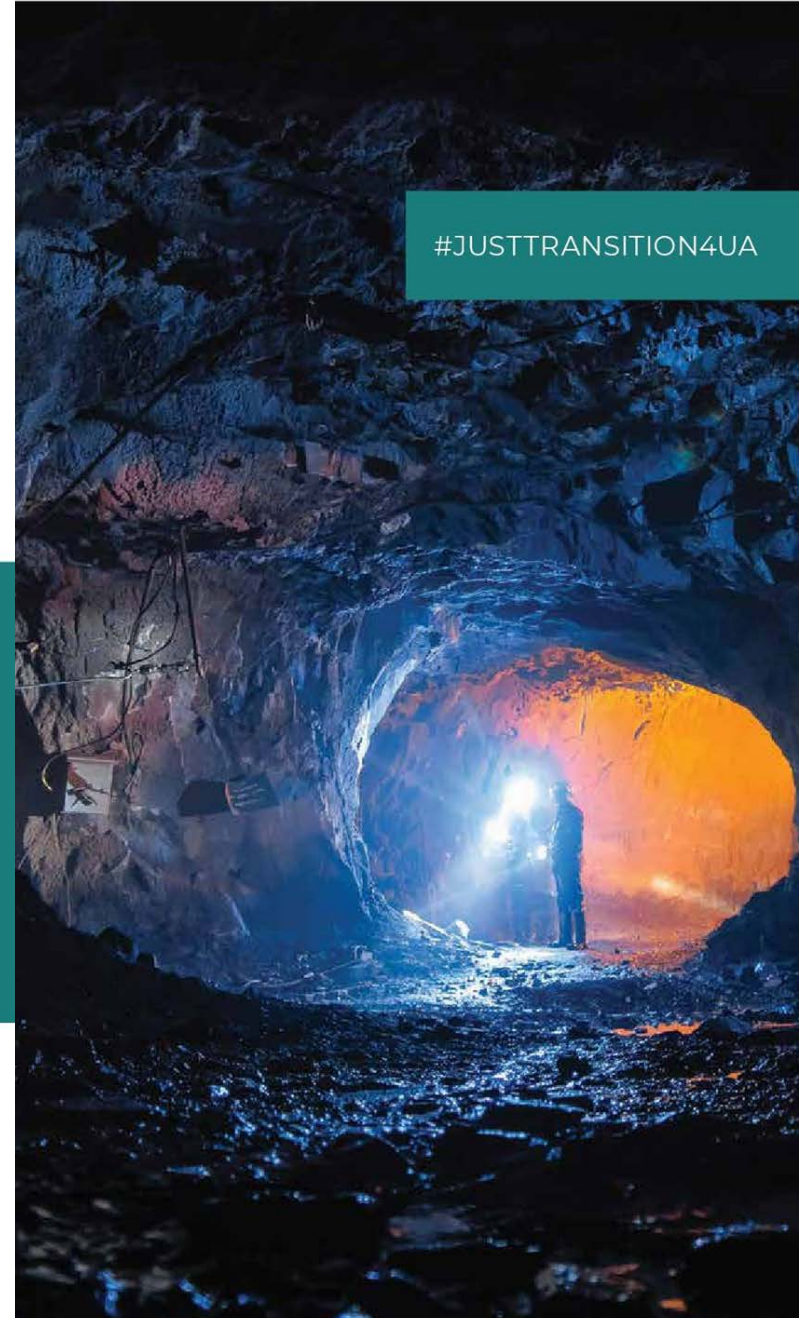
Ecoaction

Brussels, October 16th 2019



Transformation Experiences of Coal Regions:

Recommendations for Ukraine
and other European countries



#JUSTTRANSITION4UA

Study

✓ **4 countries**

- Czech Republic
- Germany
- Romania
- Ukraine

✓ **Analysis of**

- national policies
- concrete regional cases (coal regions)

✓ **authors** from academia, consulting, expert community

✓ **recommendations**, check-lists for national, regional and local authorities

Part of project "New energy, new possibilities for Donbas", funded by BMZ



With funding from the



Key recommendations: National level

1. Establishment of a **Commission for Structural Changes**
2. Setting a **coal phase-out date** for the energy sector
3. Creation of a **Restructuring plan** based on the Commission's recommendations
4. Early cooperation with the affected regions - **local needs, interests and ownership first!**

Key recommendations: Local and regional level

1. Creation of local and regional **programs for economic and social development**
2. **Diversification** of economic activities
3. Shifting to **sustainable energy generation**
4. Transformation of **education** and **infrastructure**



- ✓ Interested in the executive summary? You can get your copy from me / or download it

<http://bit.ly/transformation-coal-summary>

- ✓ Interested in the full study? You can download it

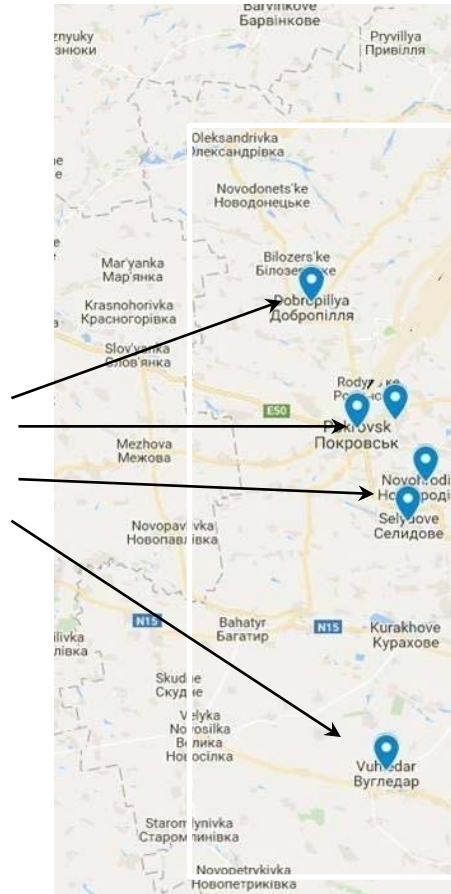
<http://bit.ly/transformation-coal>



Platform of Coal Towns of Donetsk Region for Sustainable Development

Andrii Silych (mayor of Vuhledar)
Brussels, October 16th 2019

6 Coal Towns in Donbas united to form a Platform for Sustainable Development



cumulative data:

- 265,000 inhabitants
- 40-80% of local budgets from coal company taxes

Memorandum: Signees and Goals

- Signees of the memorandum:
 - 6 mayors of coal mining towns
 - Chamber of Commerce of Donetsk Region
 - 3 NGOs from coal towns
- Approach: to address challenges of Coal towns in the context of decarbonization through pro-active structural change policies

First Lessons Learnt

- cooperation resource-intensive
- quick wins (projects) needed
- coordinating figures & structure needed
- synergy:
 - businesses can help with ideas, job creation
 - CSO can help with ideas, public awareness
- helpful: external facilitation by national CSO

General list of project ideas

Sector	Project idea
Renewable Energy Sources (RES)	<ul style="list-style-type: none">▪ solar PV on municipal buildings▪ energy cooperative
Economy and infrastructure	<ul style="list-style-type: none">▪ technology hub / start-up development▪ industrial park▪ electromobility / public and private transport▪ museum of technology / industrialization
Education	<ul style="list-style-type: none">▪ vocational education▪ retraining
Ecology	<ul style="list-style-type: none">▪ household waste management / sorting▪ recycling facility on closed coal mine▪ mine water for reuse. Creation of wastewater treatment system▪ installation of mine-based heat pumps▪ biogas production on the basis of landfill sites and silt lakes

Project #1: Clean Energy for Coal Towns

- Clean energy generation & showcase:
 - Installation of PV panels on municipal buildings (sports complexes, schools, hospitals etc.) in 6 member towns of Platform
 - Generation of electricity on the basis of **common municipal enterprise**
 - Installation of storage capacity



Project #2: Human capital for Donbas

- **infrastructure part:** renewing and adding technical capabilities to educational institutions
- **program part:** developing, testing and implementing training courses - international experts
- **outcome part:** a special credit line enables businesses to hire the newly educated specialists for innovative projects





Let us search for sustainable, future-orientated solutions for coal regions!

Thank you for your attention

INTERNATIONAL PERSPECTIVES

WORLD BANK'S GLOBAL EXPERIENCE ON ENERGY TRANSITION IN COAL REGIONS

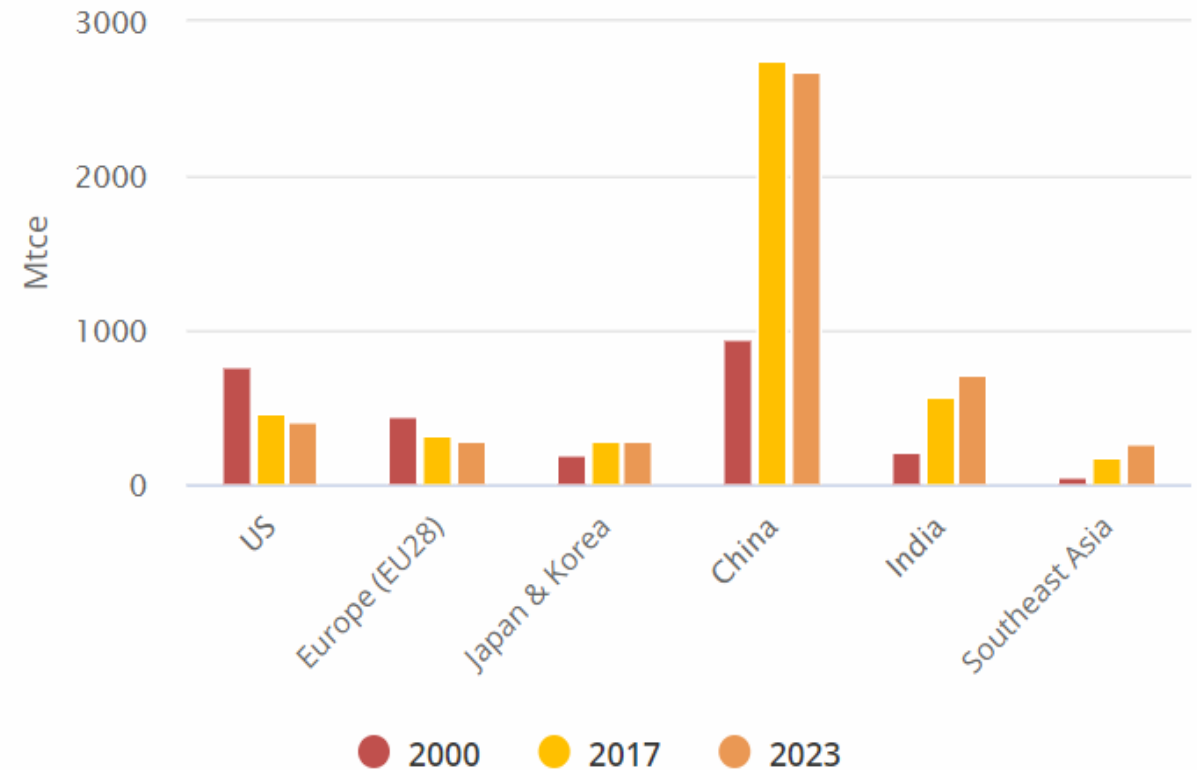
PLATFORM FOR COAL REGIONS IN TRANSITION | 6TH PLENARY & WORKING GROUP MEETINGS
WORLD BANK ENERGY AND EXTRACTIVES DEPARTMENT – GLOBAL PRACTICE
BRUSSELS, BELGIUM | OCTOBER, 2019



Global Outlook for Coal

- **Global coal demand is forecast to remain stable over the next five years**, as declines in Europe and North America are offset by strong growth in India and emerging Southeast Asia
- Risks associated with global climate policy, potentially stranded assets, local opposition and the memories of the last downturn **have cooled investors' appetite to invest in new production**
- **Coal transition in Europe exhibits three trends:** accelerated coal exit in some EU member states, recent phase out declarations in some Western Balkans states and no foreseeable phase out plans in other European countries.

Coal demand in select countries/regions in 2000, 2017, and 2023



Source: IEA Coal 2018 report

World Bank Engagement

Serbia: Managing social impacts to workers and communities; repurposing land and assets in Resavica (\$500,000)

Greece: Managing the transition in coal regions of Western Macedonia (€500,000)

Morocco: Early stage discussion on phasing out of coal fired power plants

South Africa: Early stage discussion

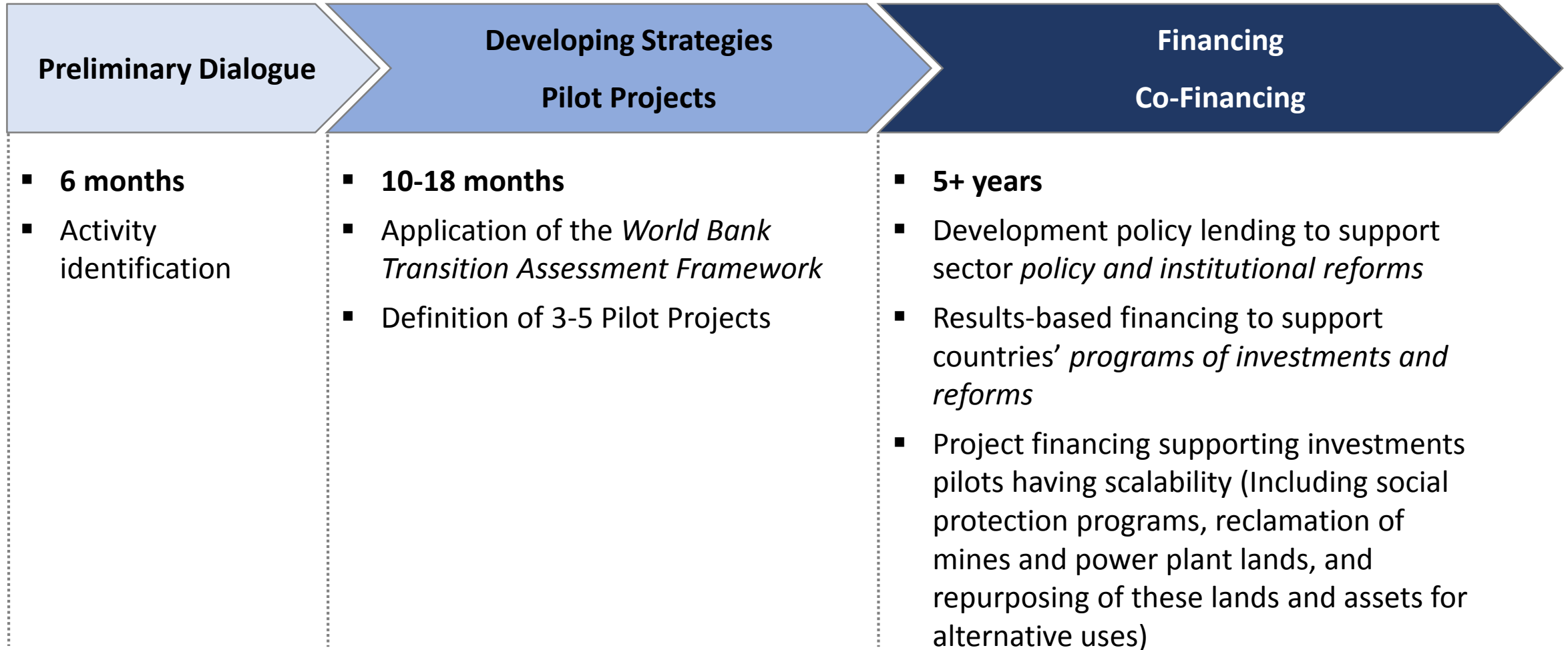
Western Balkans and Ukraine: World Bank-EC collaboration to develop a regional platform for coal regions in the Western Balkans and for Ukraine

China: Shanxi Energy Transition and Green Growth Development Policy Operation as part of China's energy revolution (\$300 million)

Observations from conversations in coal regions

- **Many coal-dependent countries are pursuing alternative energy transition programs** but which operate almost in a vacuum to efforts to address coal. There is therefore a need for more comprehensive, national level power system planning exercises to bring these two sides of the energy question together.
- **Employment diversification** in coal-dependent regions is the most critical concern of all stakeholders, and this question is linked to the need for **regional economic transition strategies**.
- **Repurposing of former mining lands and their assets** presents one of the most strategic economic opportunities for immediate transition as it unlocks development potential and can create significant jobs
- There are considerable **key knowledge gaps** which could provide tangible guidance to countries and regions, such as: capturing successful socio-economic transition cases; country (and region)-specific jobs analysis to understand supply and demand; what types of governance arrangements respond best to specific political contexts; maximizing reskilling to retain labor in former coal mining areas, etc.
- **Learning by doing**, through pilot projects, will only add further value to the discussions and exchanges
- In the last six months there has been **considerable expansion of interest to support coal regions by a range of international partners**. Coordination, collaboration and where possible, cooperation will be critical for ensuring best use of financial and technical resources.

World Bank Programmatic Support



Being Strategic About Our Assistance

- **Demand will only increase for planning and implementation assistance** as further countries and their regions transition
- Rather than individual technical assistance to regions and their countries, a **Coal Regions in Transition Academy** could provide knowledge and training to key decision-makers and transition planners
- Planning exercise will create **considerable financial demand for implementation resources** in the second phase
- **Transition Pilot Projects can serve as a first intervention, even in parallel to planning, to build momentum:**
 - ✓ Pilot projects for economic transition
 - ✓ Pilot projects for vocational training for reemployment
 - ✓ Pilot projects for repurposing of land and assets
- With the increase in interest to support coal regions by a range of international partners, a **preparation facility** should be envisaged with necessary resources (managerial, technical, social and environmental safeguard, communications, etc.) to finance the necessary pre-feasibility and feasibility studies required to get programs off the ground, and at the same time provide a one-stop-shop for financing for a select number of projects or transition programs

THANK YOU

PLATFORM FOR COAL REGIONS IN TRANSITION | 6TH PLENARY & WORKING GROUP MEETINGS
WORLD BANK ENERGY AND EXTRACTIVES DEPARTMENT – GLOBAL PRACTICE
BRUSSELS, BELGIUM | OCTOBER, 2019



Platform for Coal
Regions in Transition

Q&A

Platform for Coal
Regions in Transition

Transition success stories

12.00 – 13.00

Transition success stories – The case of Leipzig



Platform for Coal Regions in Transition
Sixth Working Group, Brussels, 16-17 October 2019



Florian F. Woitek
Political Planning Division
Saxon State Ministry for Economic Affairs, Labour and Transport
Free State of Saxony



1. Introduction of Leipzig
2. Strategic approaches
3. Future challenges and lessons learned

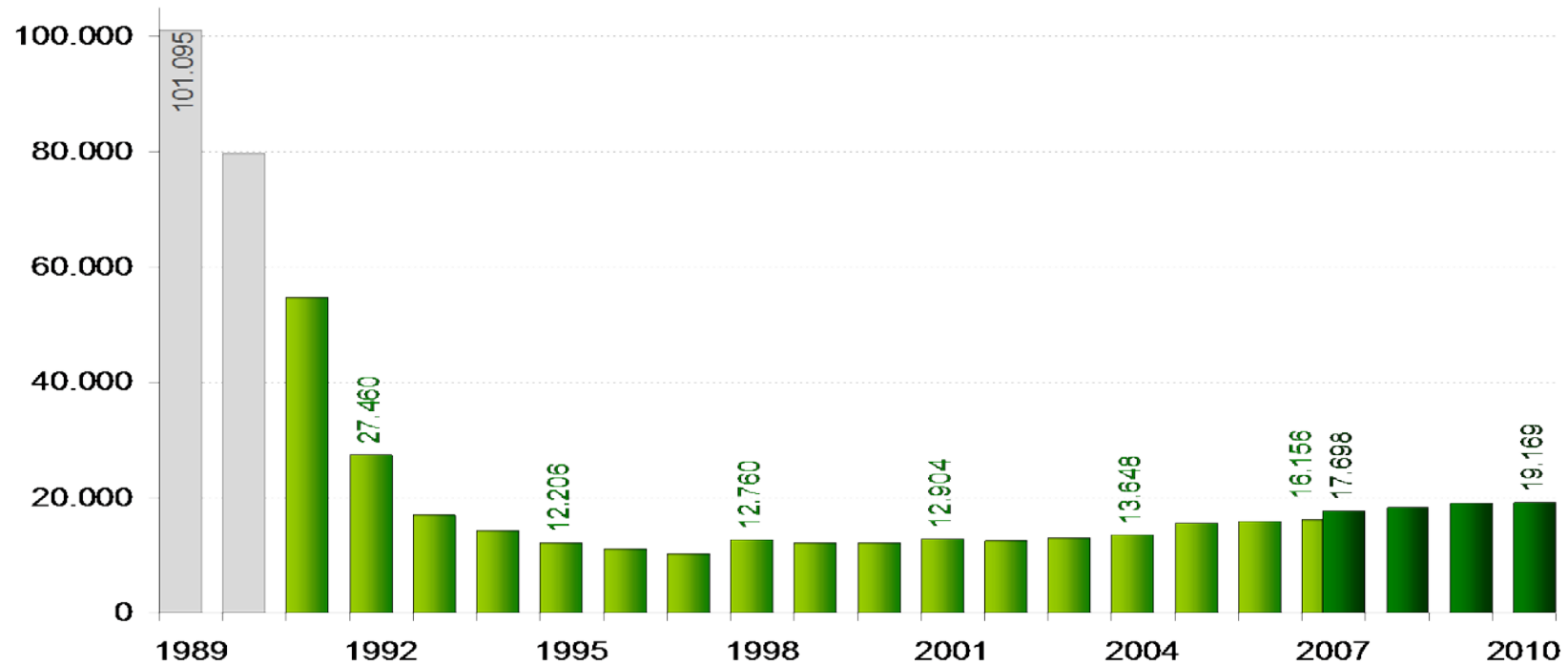
Peaceful Revolution Central Leipzig - October 16th, 1989





Leipzig – 590.000 inhabitants in the middle of Europe and the heart of the Central German lignite district

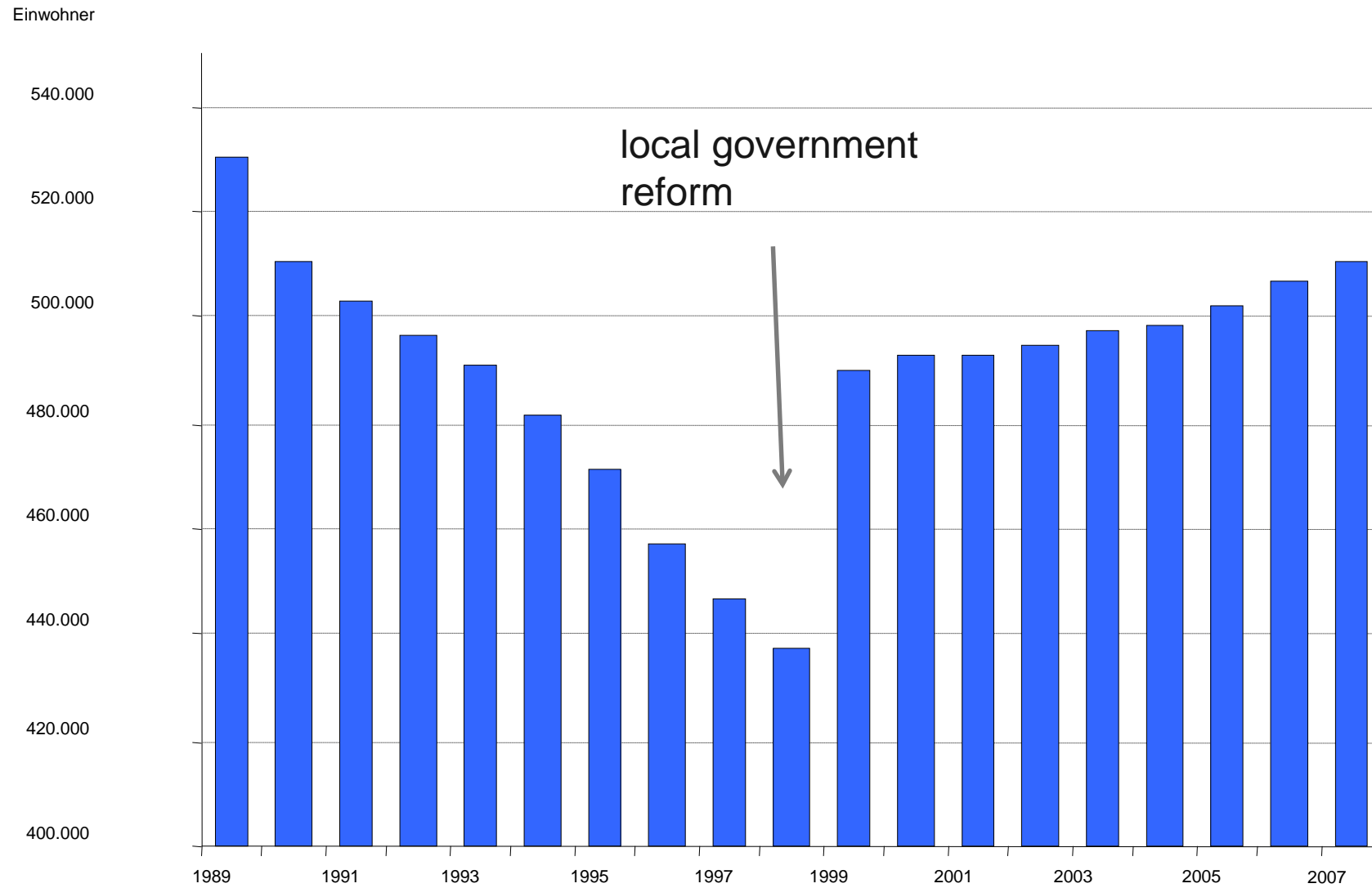




Quelle: Statistisches Landesamt Sachsen, Amt für Statistik und Wahlen

* bis 2007 Betriebe mit mehr als 20 Beschäftigte, ab 2007 gesamtes Verarbeitendes Gewerbe

Population of Leipzig 1989 - 2008



- Shrinking population and workforce
- Unemployment / social insecurity
- „urban sprawl“ / decline of city centre and district centres
- Limited public budget



Urban decline in the inner part of the city





1. Introduction of Leipzig
- 2. Strategic approaches**
3. Future challenges and lessons learned

3 phases of urban development in Leipzig



- **1990ies:**
„Boomtown Leipzig“
Urban development with large projects

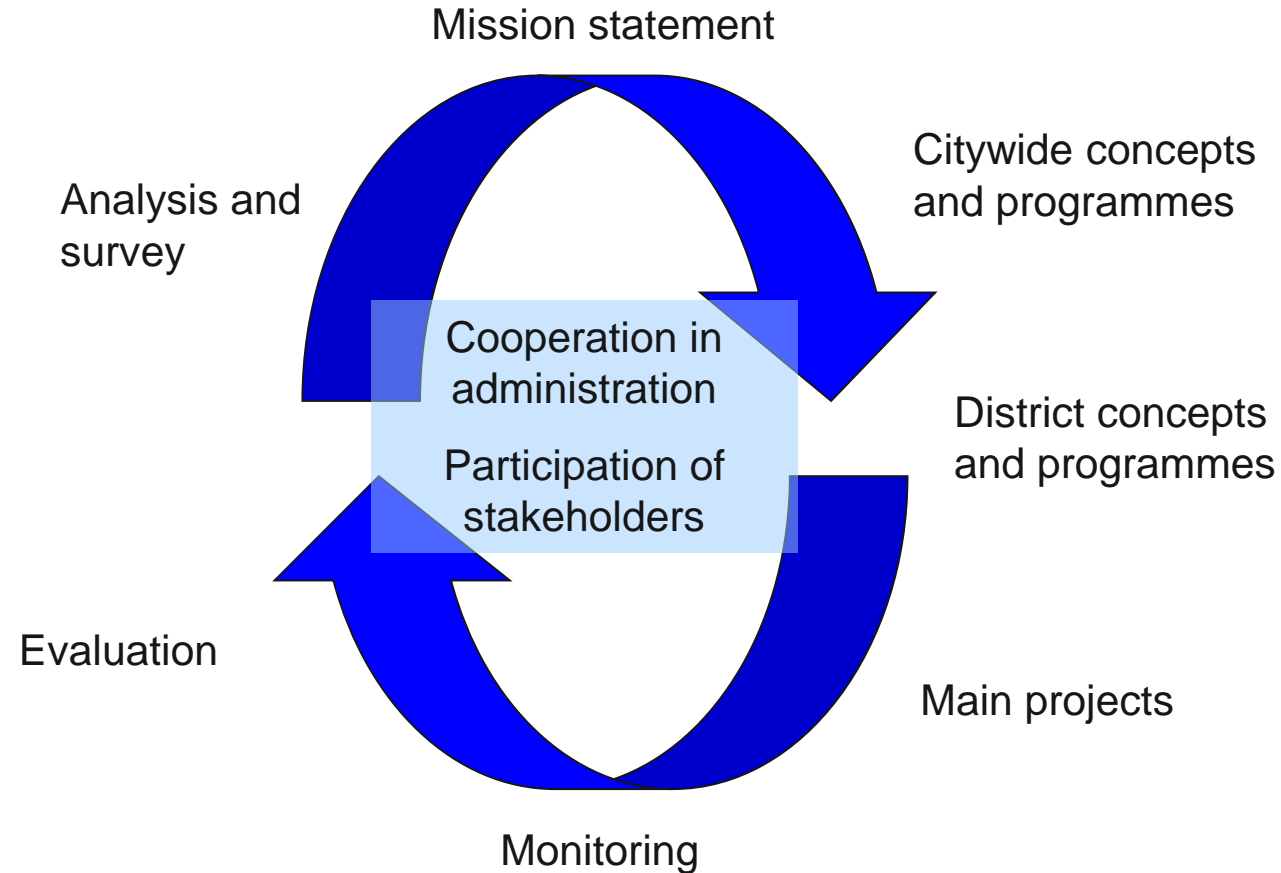


- **2000s:**
Shrinking and urban restructuring
Starting strategic planning

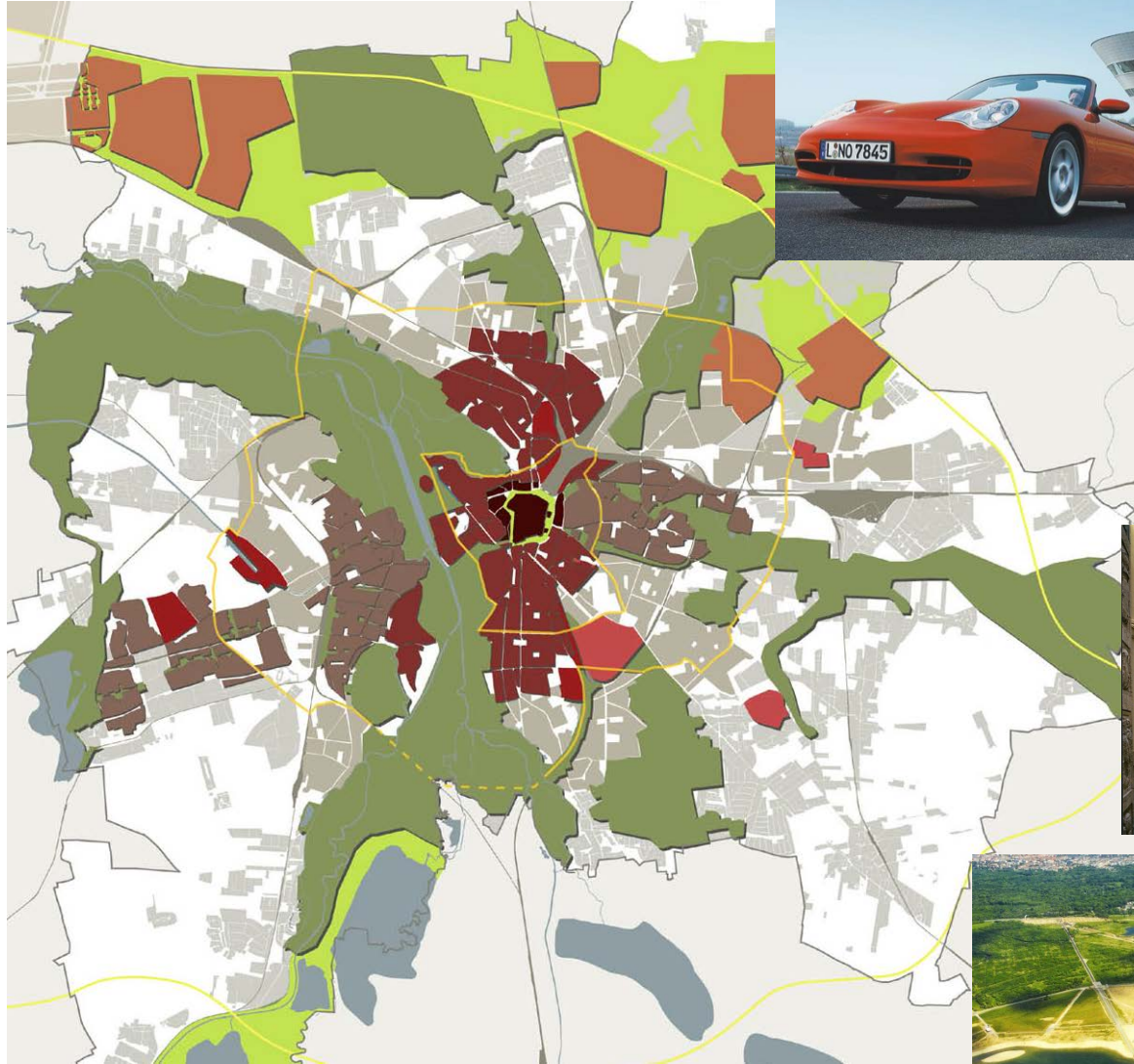


- **Today:**
Strong growth and reurbanisation
Integrated urban development

LEIPZIG
2020



- Steering instrument for the Lord Mayor
- Synergies of sectoral investments
- Priorities for budget process
- Basis for national and european funding
- Transparency for citizens



North: New fields of employment

Historic and cultural centre

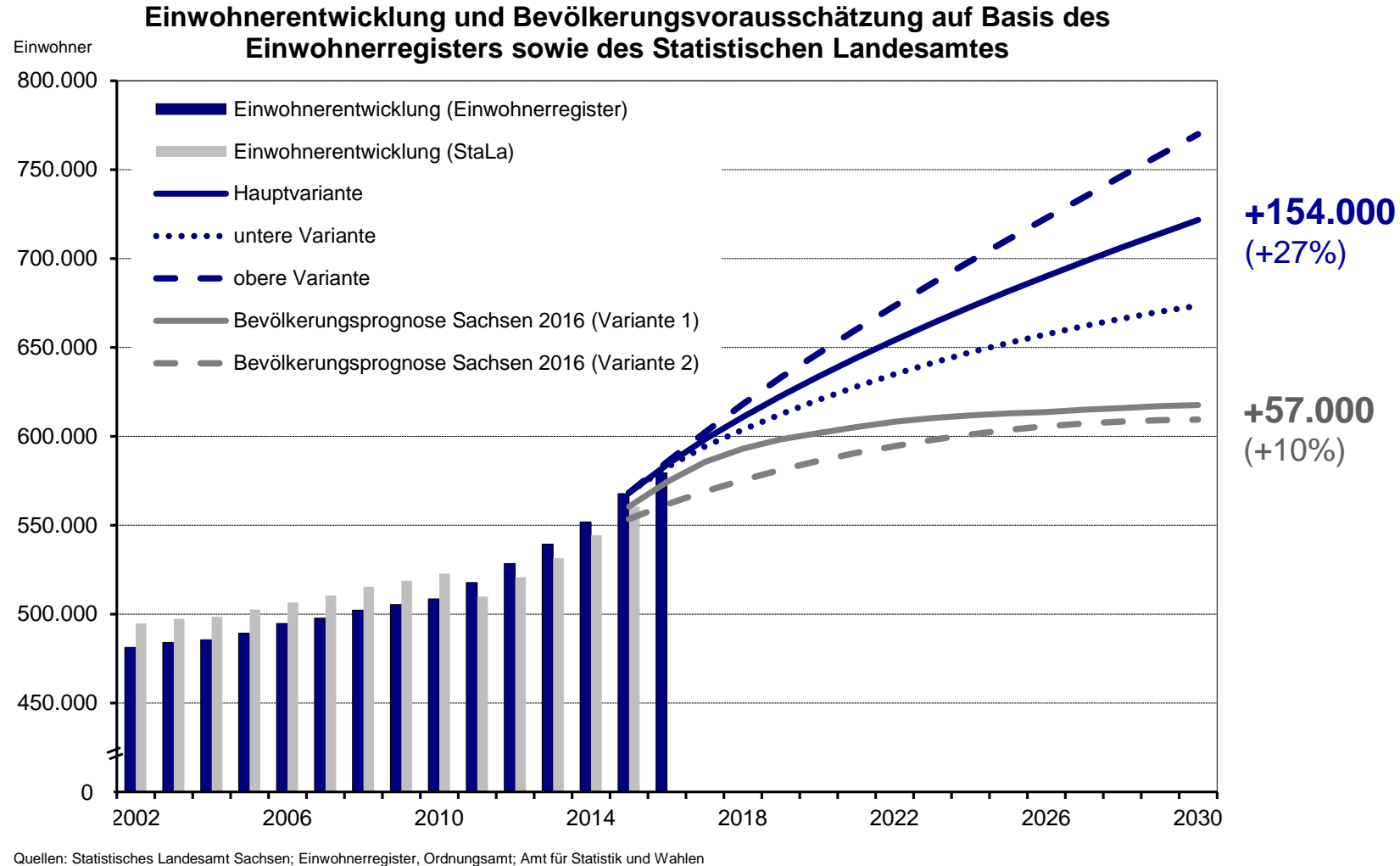


South: Leipziger Neuseenland



1. Introduction of Leipzig
2. Strategic approaches
- 3. Future challenges and lessons learned**

Population forecast for the City of Leipzig



Number of inhabitants 2018: 14.500 below central scenario and 7.300 below lower scenario

Future challenges

- Foster and expand “spill overs” to the region
- Inter- and intraregional cooperation
- Managing growth
 - Sustainable mobility
 - Securing „open spaces“
 - Social infrastructure
 - 80 new kindergartens (12.600 places)
 - 70 new or extended schools until 2030
 - Social cohesion and inclusive urban districts and housing
 - Sustainable district heating after lignite (up to 500,000+ inhabitants)





Lessons learned

- Openness and “open spaces”
- Attracting and supporting “movers and shakers”
- Positive “narrative” – “peaceful revolution” / “city of heroes” / “green city” / culture and music
- Participation
- Interregional cooperation
- Key success factors
 - Reliable social and technical infrastructure
 - “strategic awareness” and sufficient public capacities
 - Public (co-)funding from local, state, federal and EU-funds
 - Economic ties and traditions
 - Trade and fair city → airport, logistics and mobility
 - Culture and the arts → Start-ups, software and culture and creative industries
 - Medical Education (since 1415) → health, life sciences, medical applications
 - Coal, Gas and Chemical industry → EEX, clean tech, PtX/Hydrogen

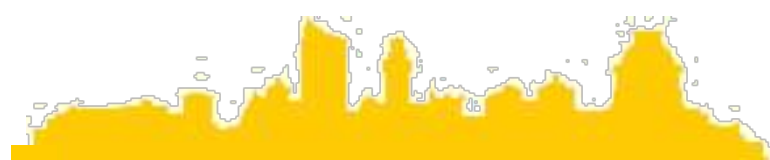


Thank you for
your attention!



Florian F. Woitek
Political Planning Division
Saxon State Ministry for Economic Affairs,
Labour and Transport
Free State of Saxony

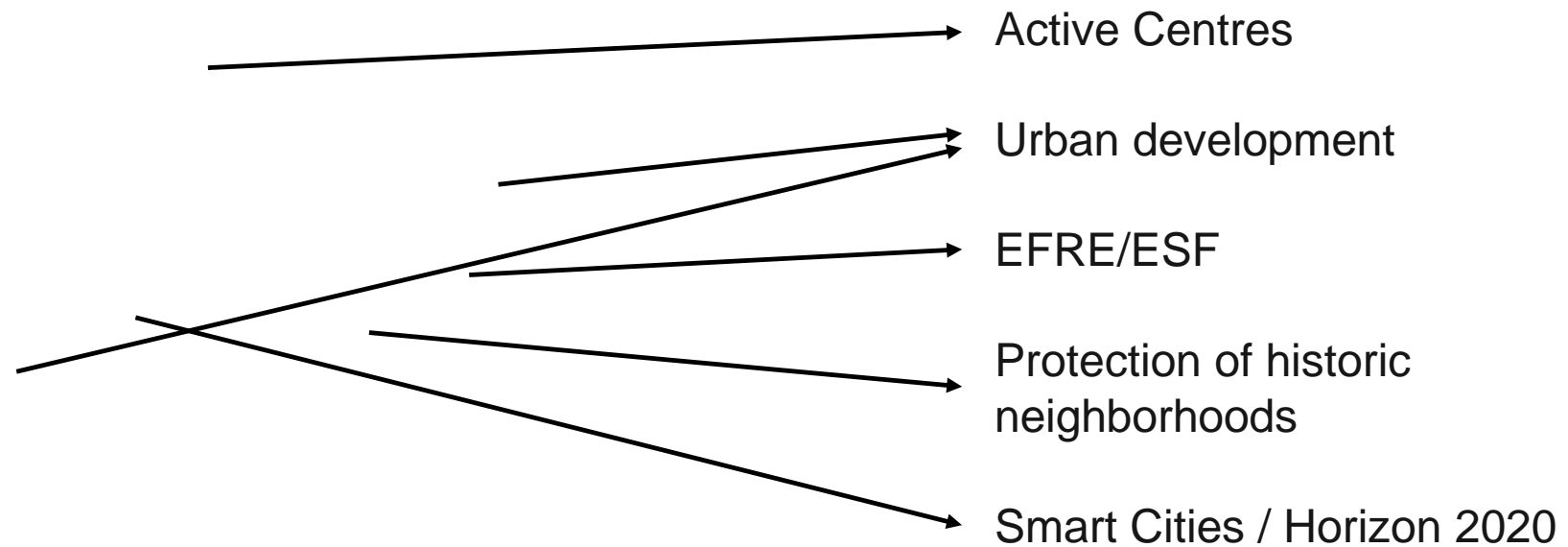
florian.woitek@smwa.sachsen.de



Focus areas of urban development and national / european funding



Funding Programmes:







OECD MINING REGIONS AND CITIES

CASE STUDY

OUTOKUMPU - NORTH KARELIA, FINLAND

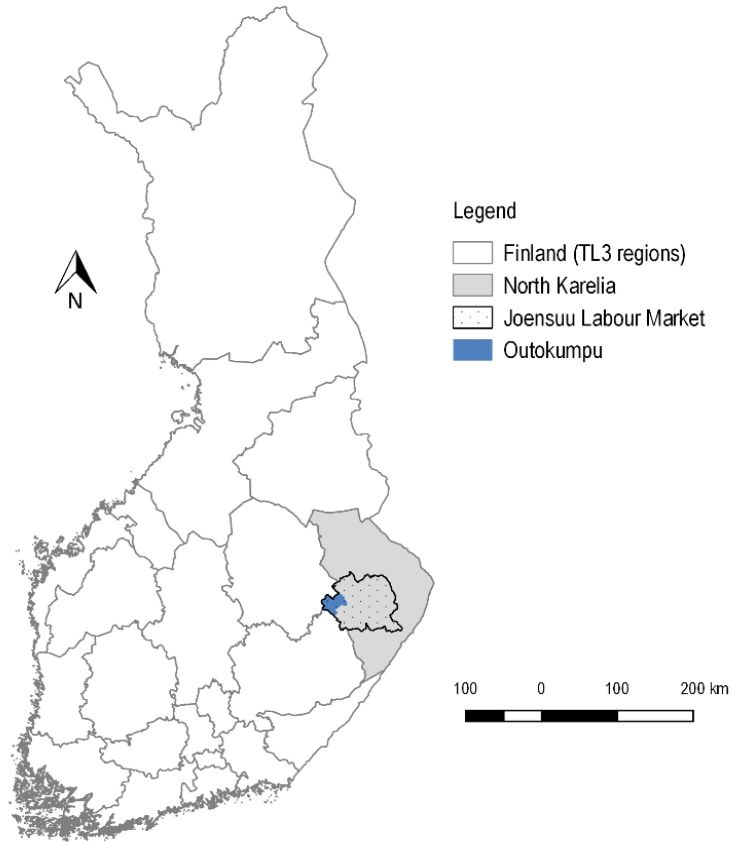
EU Coal Regions in Transition
16 October, 2019



1. **Key facts**
2. Transition story
3. Future directions



Outokumpu - North Karelia, Finland





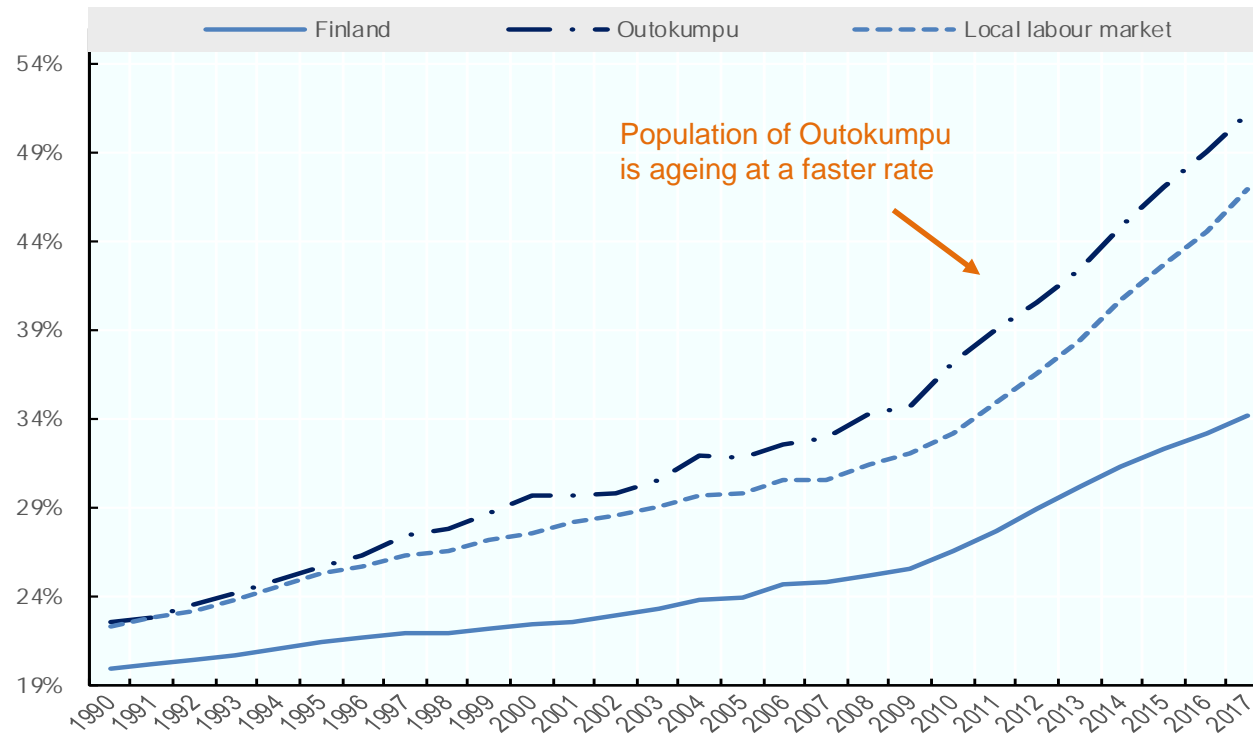
Specialisation in industrial sectors (mining and manufacturing)

	Finland	LLM	Outokumpu
Agriculture, forestry and fishing (A)	3%	9%	4%
Public administration and defence, compulsory social security, education and human health (O,P,Q)	29%	33%	25%
Construction (F)	7%	7%	5%
Real estate (L)	1%	1%	1%
Other services (R,S,T,U)	5%	5%	4%
Mining and quarrying, electricity and water supply (B,D,E)	1%	3%	4%
Manufacturing (C)	13%	15%	33%
Whole sale and retail trade, transportation, accommodation and food services (G, H, I)	21%	15%	13%
Information and communication (J)	4%	1%	1%
Professional, scientific, technical and administrative activities (M, N)	13%	8%	10%
Financial and insurance activities (K)	2%	1%	0%



Population decline and ageing

Old-age dependency ratio 1990-2017



- Population decline in Outokumpu is a mix between a constant natural population decline and net outmigration.
- The elderly population of Outokumpu is growing. In contrast the youth population and labour force is declining



1. Key facts
- 2. Transition story and lessons**
3. Future directions



Transition in resource-based economies

- Nature of the adjustment and policy response - staged restructuring, shock, proactive support
- Strength of local institutions – distributed leadership, consensus, linkages
- Other areas of absolute and competitive advantage (resource endowments, food production, amenities, access to markets)
- Level of integration between mining and extractive operations and the local economy
- Size and skills-base of the local population that influences the diversification of the economy and its capacity to adjust to shocks



Outokumpu copper mine





Key strategies

- Local transition committee was established in the late 1960s (local municipality, company, and local community leaders)
- Industry park was established in the late 1970s with incentives from the Government of Finland (land, construction of buildings, and wage subsidies for 3 years)
 - Outokumpu Mining Company established a spinoff mining and equipment and technology company as an anchor tenant
 - Government of Finland located a key mineral processing laboratory of the Geological Survey of Finland
- Local governments in the area formed a development company to attract investment
- Mining heritage and tourism centre (including the mining archive of Finland)



Lessons

- Transition is a long-term process and ongoing
- Proactive local leadership
- Support of industry and national governments/ EU are critical (timely investments, incentives)
- Focus on how to redeploy existing strengths (e.g. industry park)
- Consider how to deal with stranded assets (mine site and infrastructure, housing, public services and infrastructure)



1. Key facts
2. Transition story and lessons
3. **Future directions**



Recommendations by OECD

- Mobilising local assets:
 - Green mining technologies (inc. leveraging linkages with forestry in areas such as photonics, ICT, and the circular economy)
 - Flagship project (tailings, mining rehabilitation)
- Diversifying the economy:
 - Build a better entrepreneurial eco-system
 - Open innovation processes (linked to mining and related manufacturing)
- Improving policies and governance:
 - Linking national mining policy instruments with regional development
 - Strengthening inter-municipal cooperation (e.g. workforce development and skills)



THANK YOU FOR YOUR
ATTENTION

CHRIS.MCDONALD@OECD.ORG

[WWW.OECD.ORG/CFE/REGIONAL-POLICY/MINING-
REGIONS.HTM](http://WWW.OECD.ORG/CFE/REGIONAL-POLICY/MINING-REGIONS.HTM)



EINDHOVEN INTERNATIONAL PROJECT OFFICE
OPERATING COMPANY BRAINPORT REGION EINDHOVEN

Who we are



Joost Helms
(director)

- Former vice mayor of Eindhoven
- Director Eindhoven Academy, institute for successful collaboration in the Brainport Eindhoven ecosystem



Peter Portheine
(director)

- Entrepreneur by nature
- Program director Smart Cities Brainport
- Elected member of the Provincial Council of North Brabant



Where we come from

The development of the Brainport Eindhoven region was initiated by government with a public funded development company, established with a focus on developing the region itself

To accommodate international requests from other cities and regions, to support their socio-economic development based on the Brainport Eindhoven Triple Helix model, a private operating company has been founded to serve these requests

What we do

Sharing experience and knowledge on successful collaboration, with a focus on creating new and better ecosystems, Smart City strategies and socio-economic development for regions and cities around the world



Triple Helix collaboration



Building ecosystems



Smart City development



Boost marketing & FDI

Brainport Eindhoven

the Dutch
Approach to
Innovation
& High Tech
Development



Strategic Location



Drivers of Dutch Economy

Amsterdam Airport

(headquarters, trade, services, legal, finance, tourism, arts)

inh: 1,5 mln - 13% GDP NL

Rotterdam Seaport

(logistics, oil/chemicals, commodities)

inh: 1,2 mln - 10% GDP NL

Eindhoven Brainport

(hightech, electronics, design)

inh: 0,7 mln - 11 % GDP NL



CO-CREATING THE FUTURE

Company town



Lorem ipsum dolor sit amet, consectetur adipiscing elit.



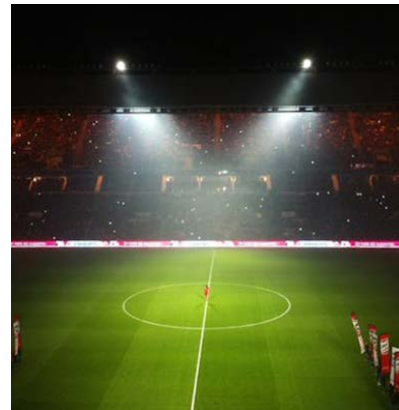
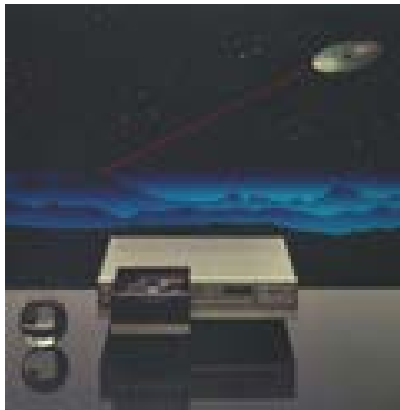
Lorem ipsum dolor sit amet, consectetur adipiscing elit.



Lorem ipsum dolor sit amet, consectetur adipiscing elit.



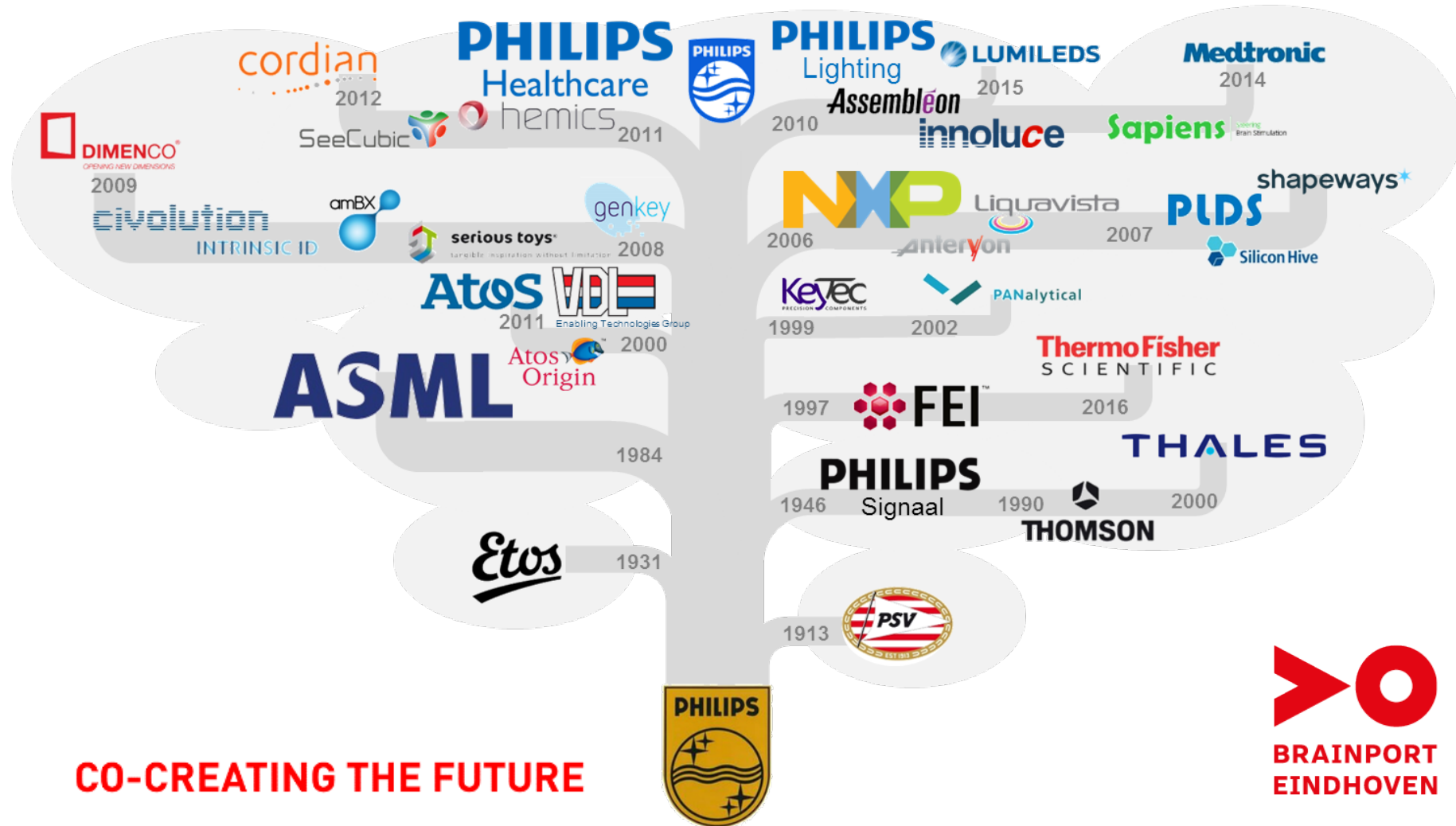
Philips history



CO-CREATING THE FUTURE



Philips legacy



1990's Crisis

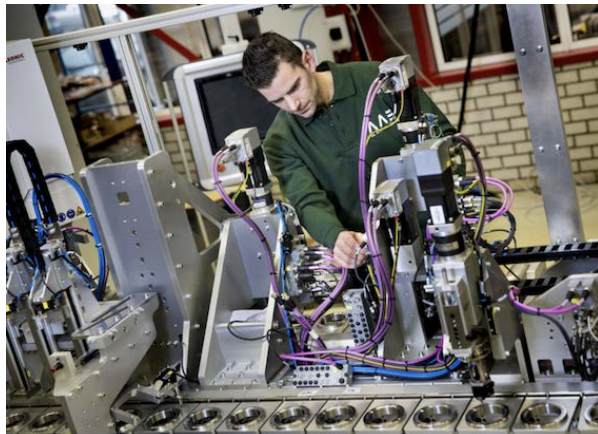


CO-CREATING THE FUTURE



Brainport Eindhoven – USP's

**Complex
High Tech
Systems**



**Research
and
Innovation**

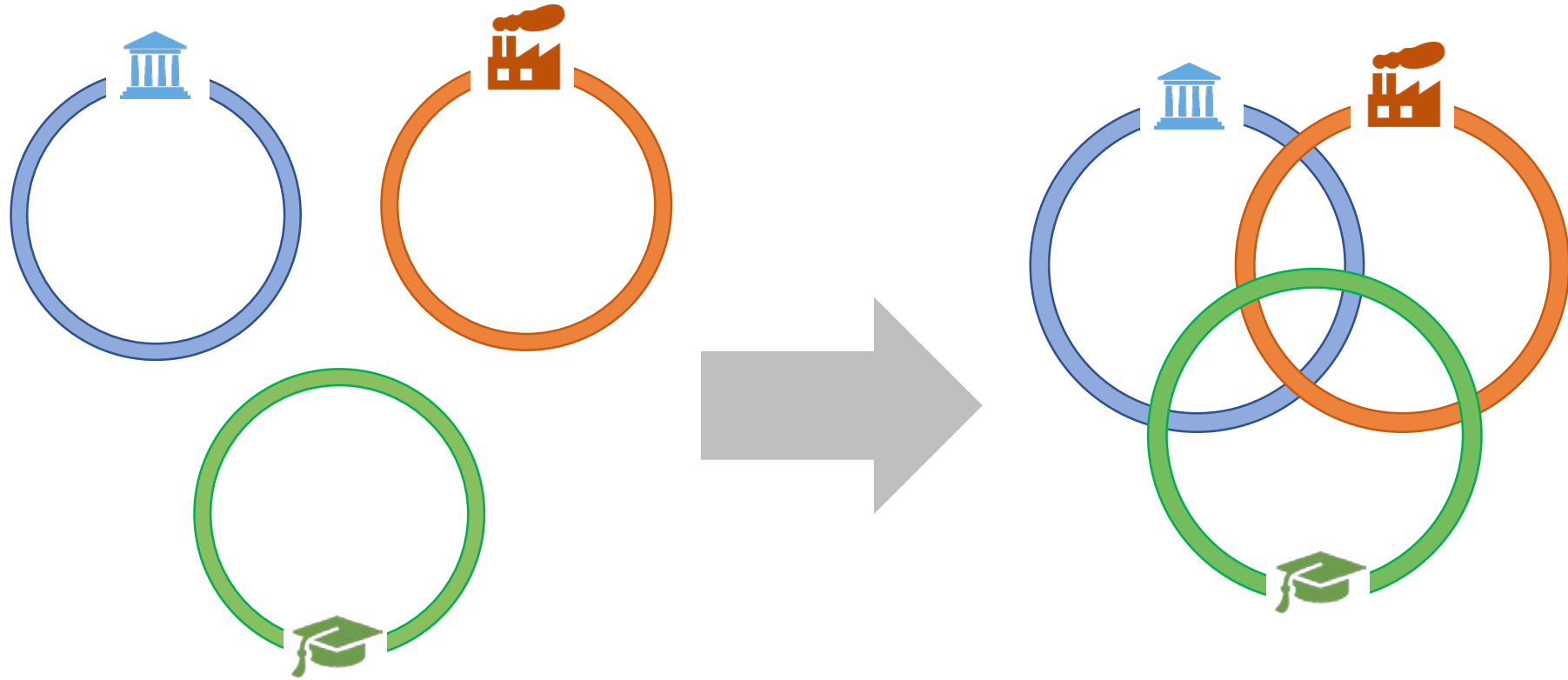


Design



CO-CREATING THE FUTURE

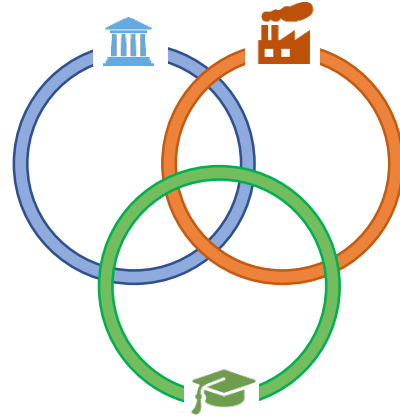





INDUSTRY


KNOWLEDGE


GOVERNMENT



Triple Helix Collaboration

CO-CREATING THE FUTURE



Organization

Brainport Foundation = Triple Helix Board

1. Governments: Local and regional representatives
2. Knowledge Institutions: Universities, vocational colleges, research institutes
3. Industry: OEM's, SME, regional suppliers

--> DEFINING JOINT AGENDA

Brainport Development = Execution

- Strategy development
- Development of projects and programs
- Branding and events

CO-CREATING THE FUTURE



Adapting the model of Triple Helix collaboration

HOW ?

- Shared vision / ambition
- Serve and respect individual interests
- Good relations

LOCALIZE !

- Governmental system
- Regional structures
- Existing collaboration
- National and local culture

TRUST, OPENNESS & LEADERSHIP!



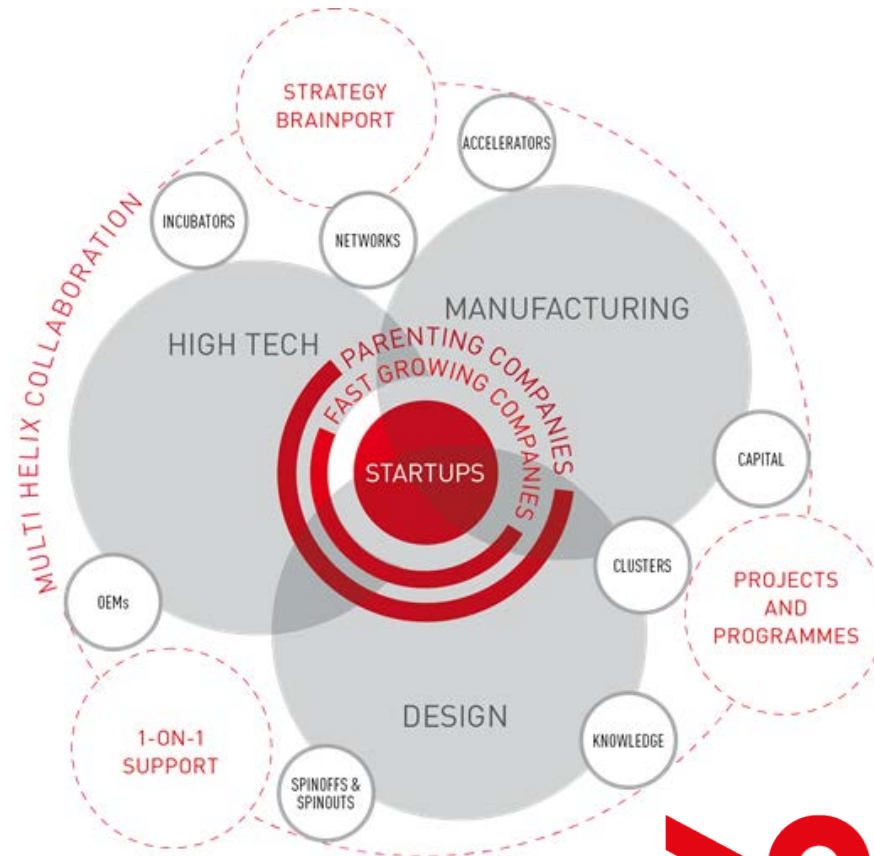
Ecosystems

CO-CREATING THE FUTURE



Strengths of the Brainport ecosystem

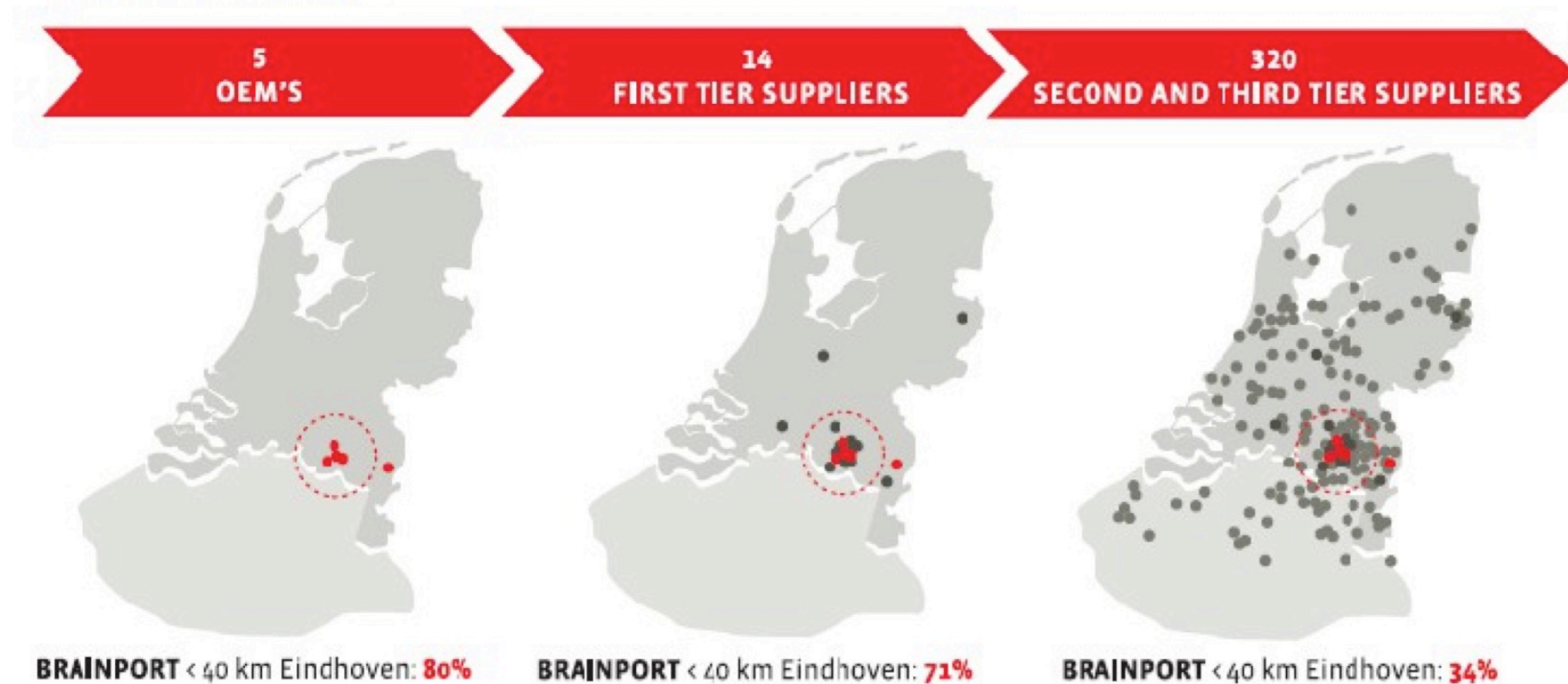
- Supply chain networks
- Public and private R&D
- Incubation & Startups
- Open Innovation
- Campusses



CO-CREATING THE FUTURE



Supply chain networks



CO-CREATING THE FUTURE



ASML – Lithographic equipment

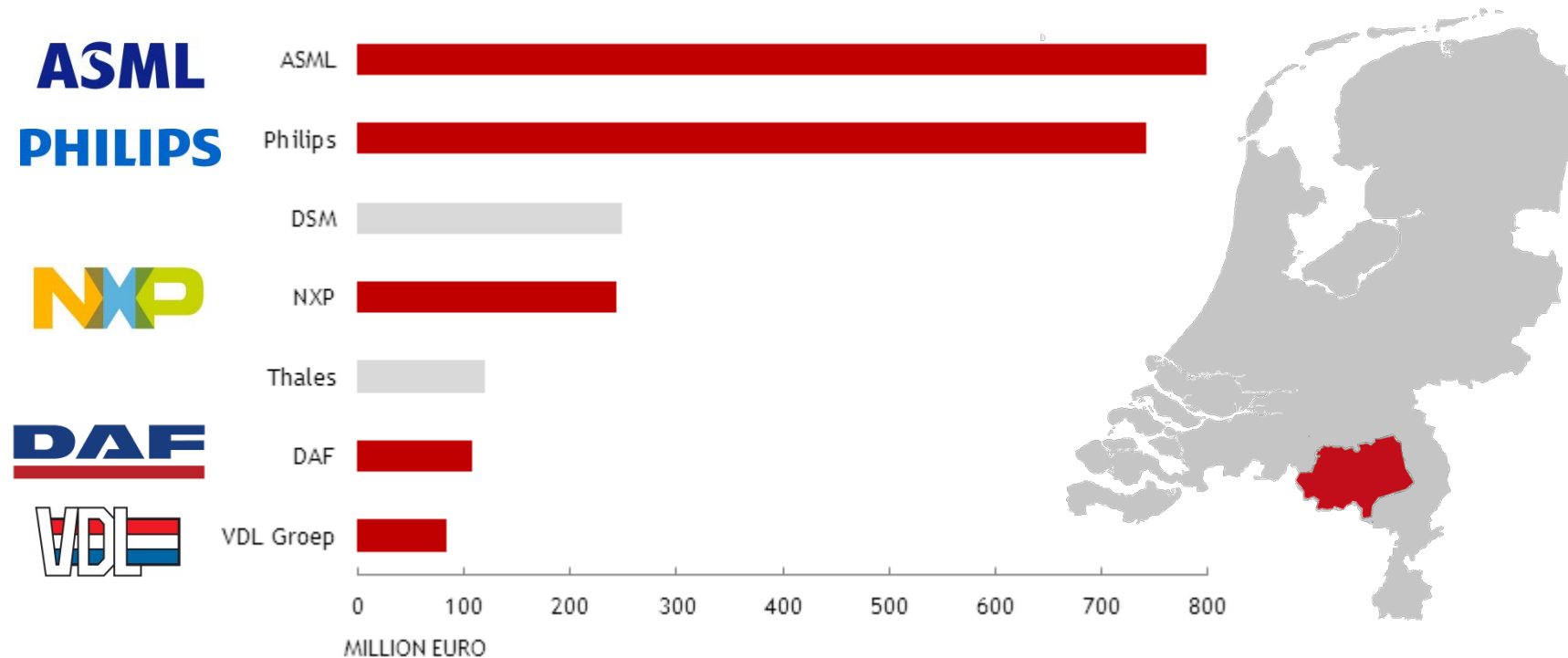
600 product related 1st suppliers

2nd and 3rd tier: > 3000

> 85% of value of custom made
parts and modules are purchased



Corporate R&D in The Netherlands



CO-CREATING THE FUTURE



Public R&D (& PPP)

Dutch knowledge institutes

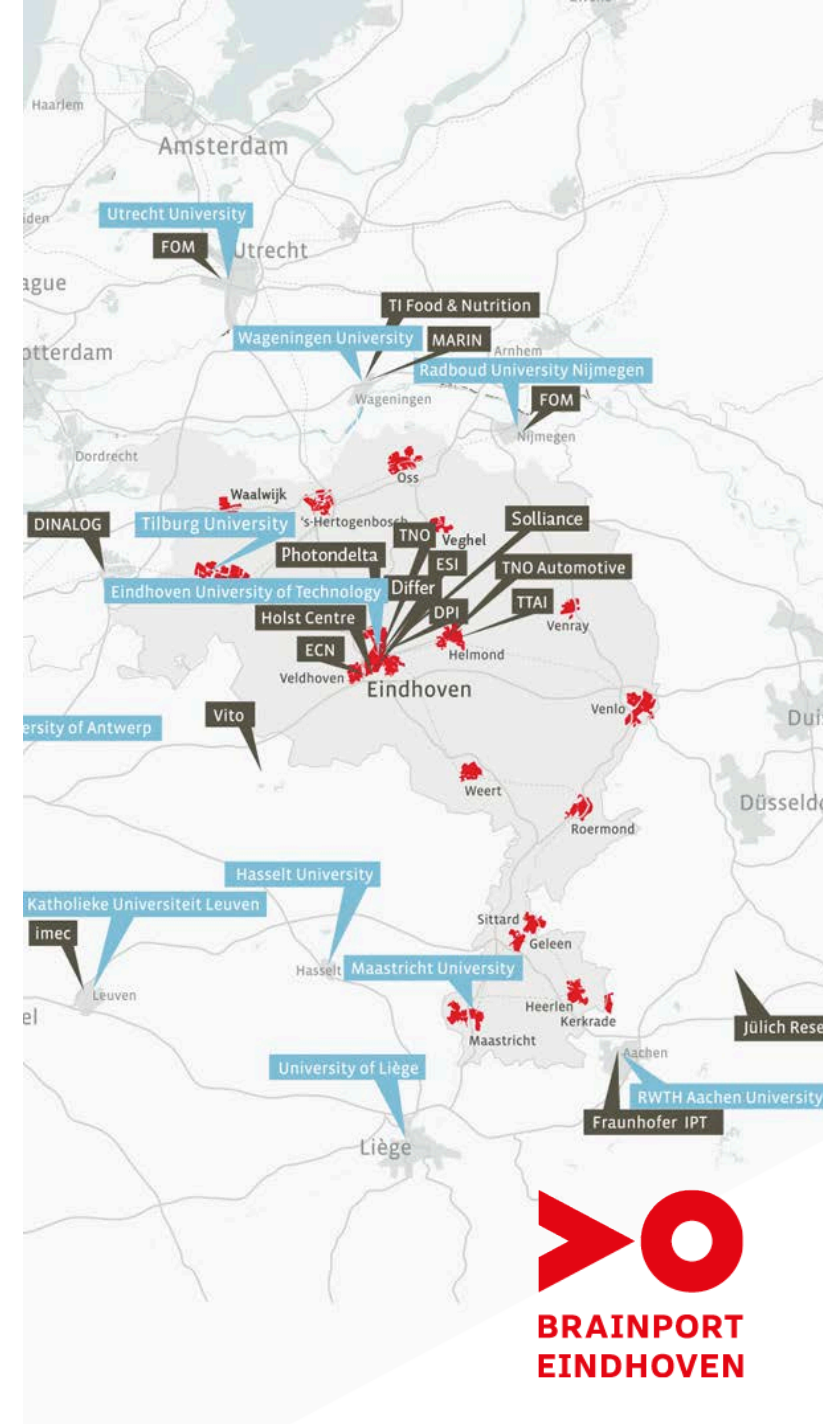
TU/e (university of technology), Fontys (university of applied sciences), TNO (applied research), Holst (sensor & flexible electronics), Differ (fusion energy & solar fuels), ECN (energy), Photondelta (integrated photonics), DPI (polymers & materials), Solliance (solar), ...

International knowledge institutes

EIT Digital, imec, KICInnoenergy, Singularity University, ITRI, Institute of Advanced Industrial Science and Technology (AIST), ...

International networks

ITEA3 (Software-intensive Systems), Fraunhofer, Artemis (Embedded & Cyber-Physical systems), ...



CO-CREATING THE FUTURE

Incubation & Start-ups

17 incubators

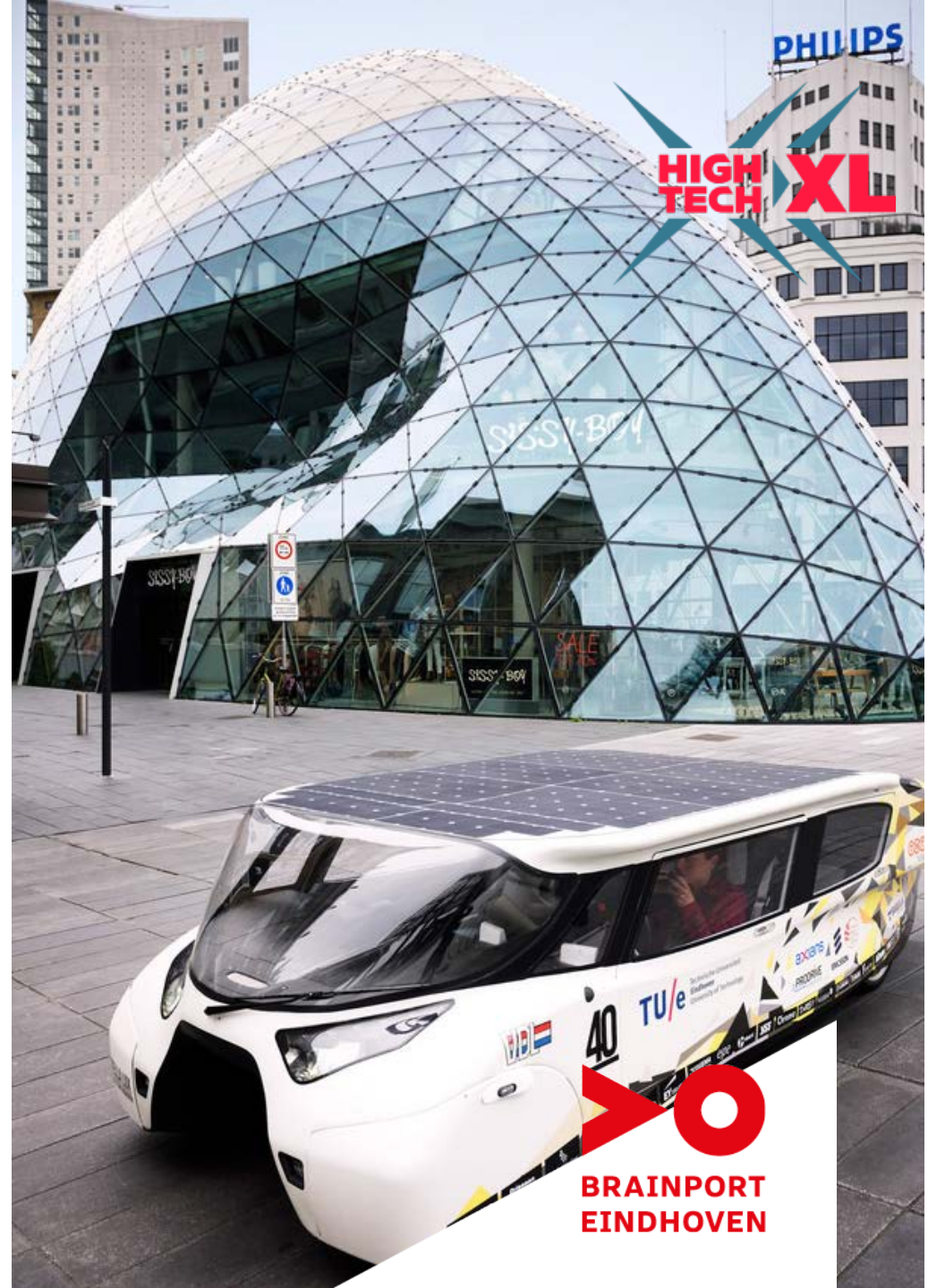
14 Accelerator programs

- NextOEM
- HighTechXL
- StartupBootcamp
- ...

Studentteams & student startups

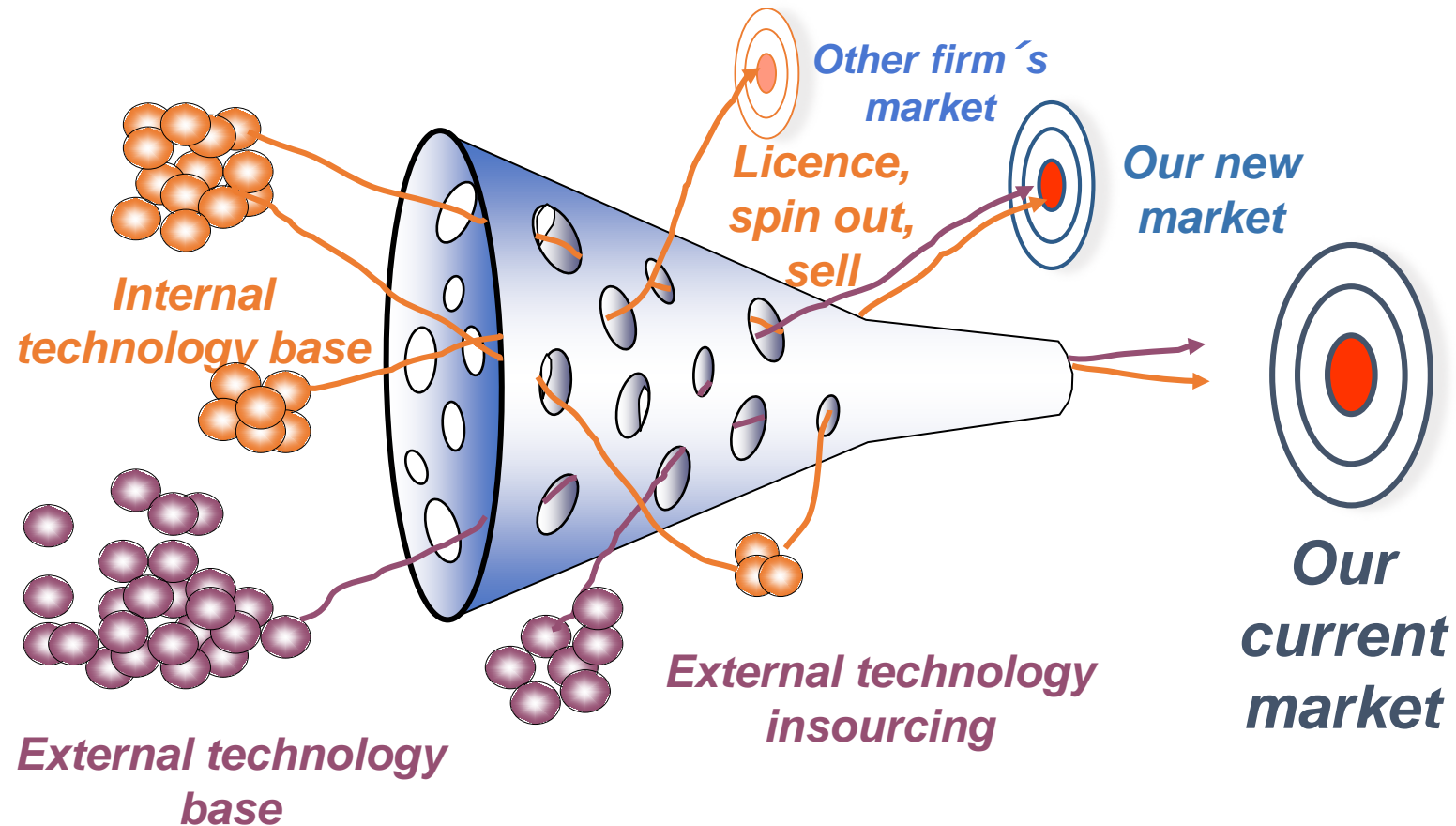
- TechUnited – Robocup team
- Stella – Solar powered family car
- FAST – Formic acid sustainable transportation
- Amber – autonomous car sharing (startup)
- ...

CO-CREATING THE FUTURE



**BRAINPORT
EINDHOVEN**

Open innovation



CO-CREATING THE FUTURE

Brainport campuses

Science
CAMPUS



WHERE INNOVATION
STARTS

High Tech
CAMPUS

HIGH TECH CAMPUS
EINDHOVEN

LAUNCH
YOUR BUSINESS

Creative
CAMPUS



CREATIVE HEART

Manufacturing
CAMPUS



YOUR HIGH TECH
OPEN SUPPLY CHAIN

Automotive
CAMPUS



DRIVEN TO MOVE
THE FUTURE

CO-CREATING THE FUTURE



Success of Innovation

23%

of innovation success results from
technological innovation

77%

of innovation success depends on **social
innovation**

new ways of managing, organizing and
working

*Prof. Henk Volberda a.o. 2012
Rotterdam School of Management*

CO-CREATING THE FUTURE



Platform for Coal Regions in Transition

	Room 2A	Room 1A	Room 1D
14.30 - 16.20	Coal-mine closure companies	Transition success stories	Interregional dialogue
16.20 - 16.40	Coffee break		
16.40 - 18.30	Social Dialogue in Transition	Analytical approaches to regional transition	International perspectives and experiences