



Welcome Private sector investments

Platform for Coal Regions in Transition

#CoalRegionsEU

Energy

Ensuring a Just Transition



Drax Group

UK FTSE

Multi-site, multi-technology portfolio

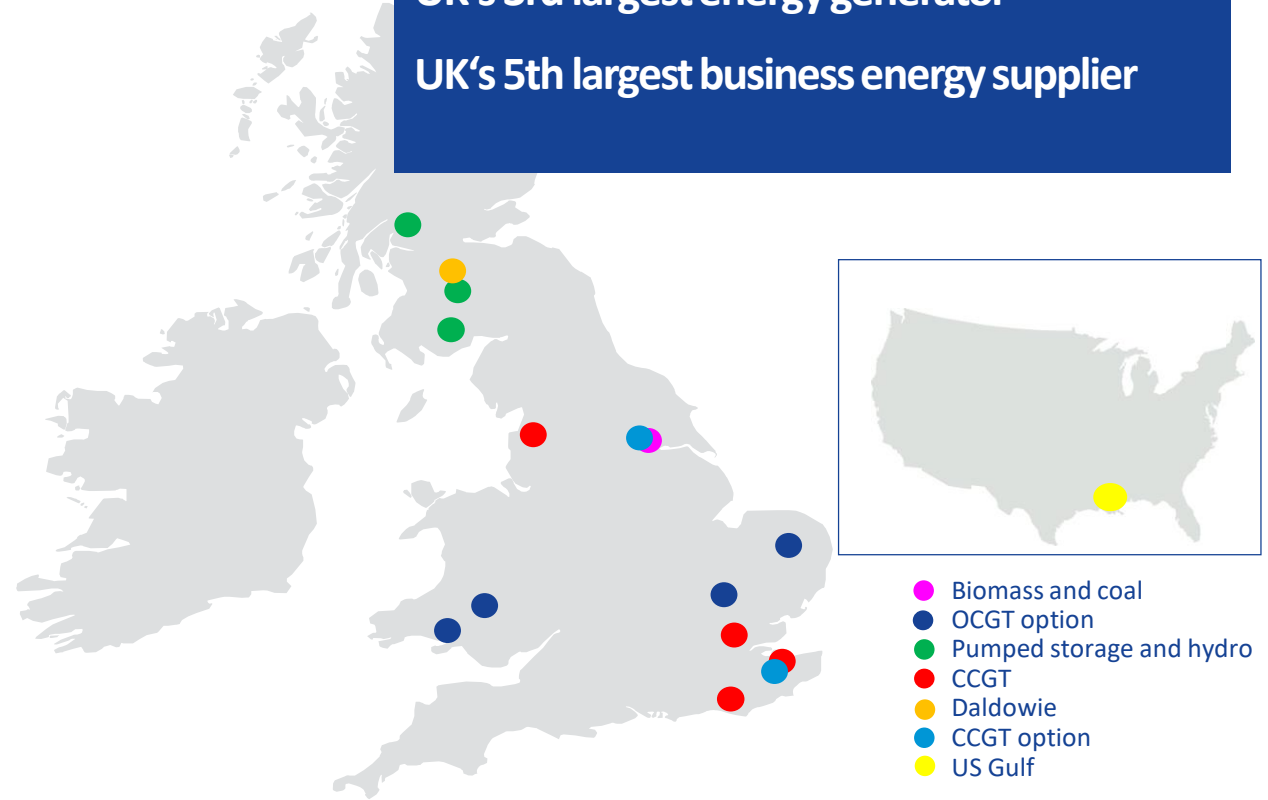
- Scotland, England, Wales and US Gulf

UK's largest source of renewable generation

12% of UK's renewable power in 2018

UK's 3rd largest energy generator

UK's 5th largest business energy supplier



Drax Power Station

Europe's largest decarbonisation project



4 of 6

645MW boilers
converted from coal
to sustainably sourced
biomass

12%

UK's renewable
electricity in 2018

18,500

UK jobs directly or
indirectly supported
by Drax

UK Economic Footprint

- 2,115 UK Drax Group Employees
- 900 employees based in Selby
- Contributes £420m to the region
- Contributes £1.7bn to national GDP



Investing in our supply chain

- Hull:
 - ❖ £20m investment
 - ❖ 1m tonnes of pellets p.a.
 - ❖ 40 permanent jobs created
- Immingham:
 - ❖ £150m investment
 - ❖ 6m tonnes of pellets p.a.
 - ❖ 100k tonnes storage
 - ❖ 75 permanent jobs created
- Liverpool:
 - ❖ £100m investment
 - ❖ 3m tonnes of pellets p.a.
 - ❖ 100k tonnes storage
 - ❖ 47 permanent jobs created
- Tyne:
 - ❖ £20m investment
 - ❖ 1.4m tonnes of pellets p.a.
 - ❖ 300 permanent jobs created

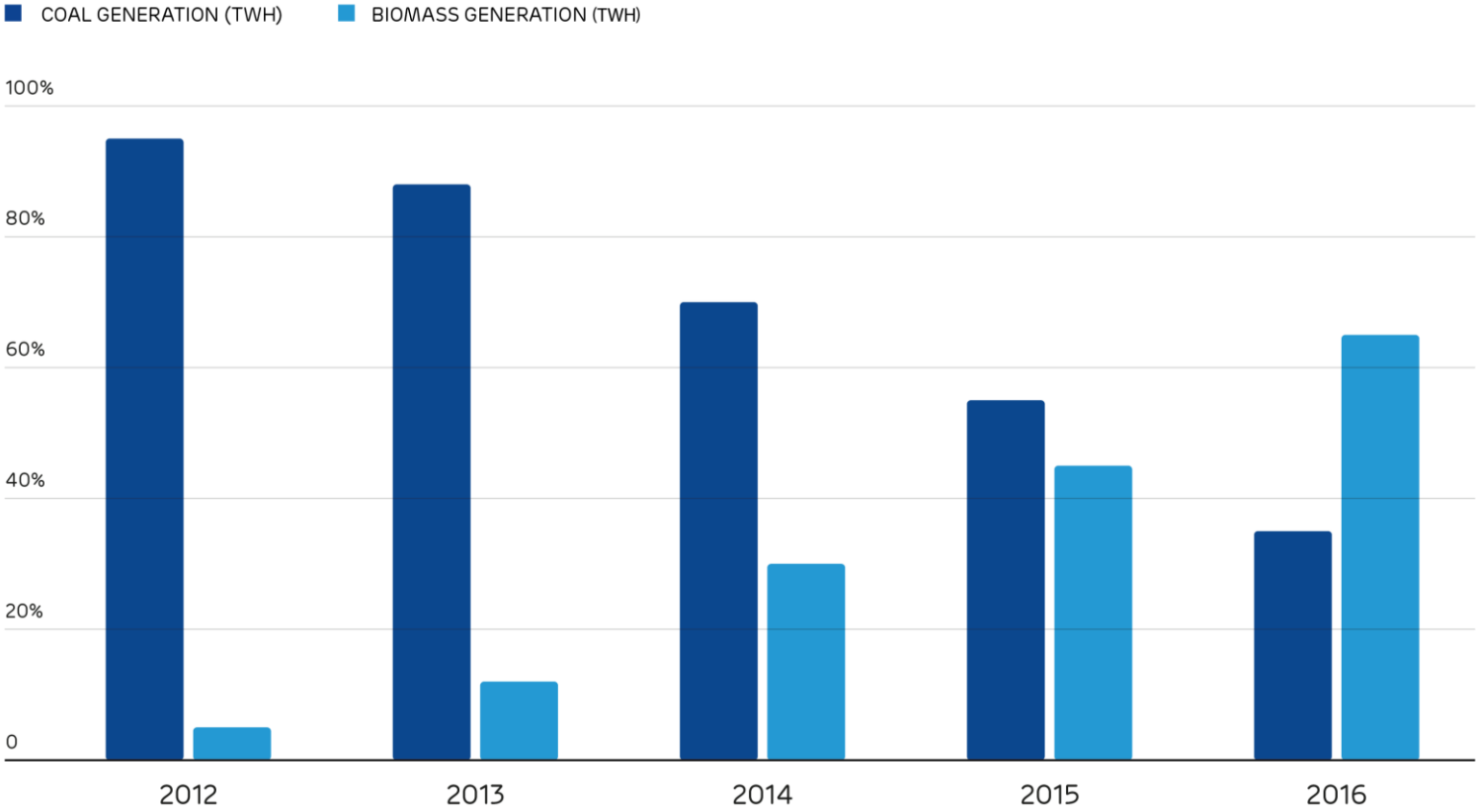


Drax biomass rail wagons

- 225 bespoke, British-made biomass wagons purchased so far



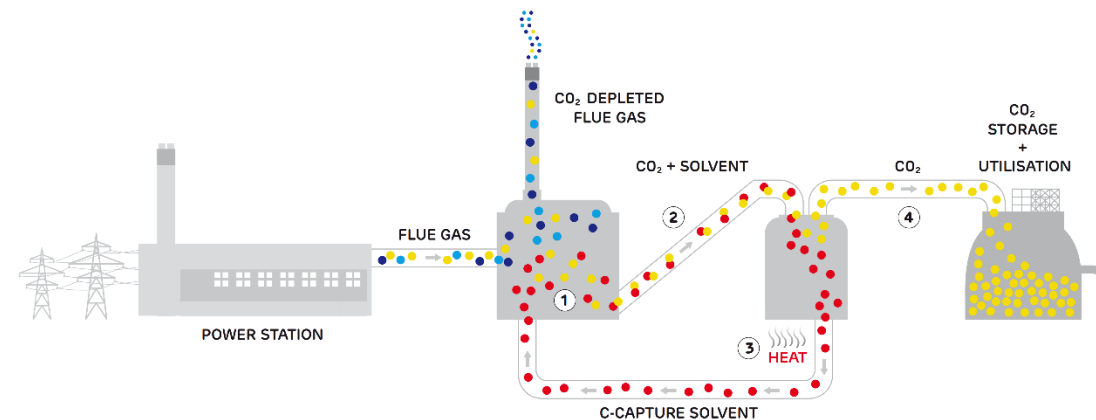
Powering past coal



Carbon Capture & Storage

- Drax is undertaking a ground-breaking project to combine biomass with carbon capture and storage (BECCS) technology at Drax Power Station
- Partnering with C-Capture, a spin-out of Leeds University, to capture carbon emissions from one of the units at Drax that generates electricity from sustainably sourced wood pellets
- Capturing one tonne of carbon every day
- Aiming to be the world's first carbon negative power station

C-Capture BECCS pilot at Drax Power Station



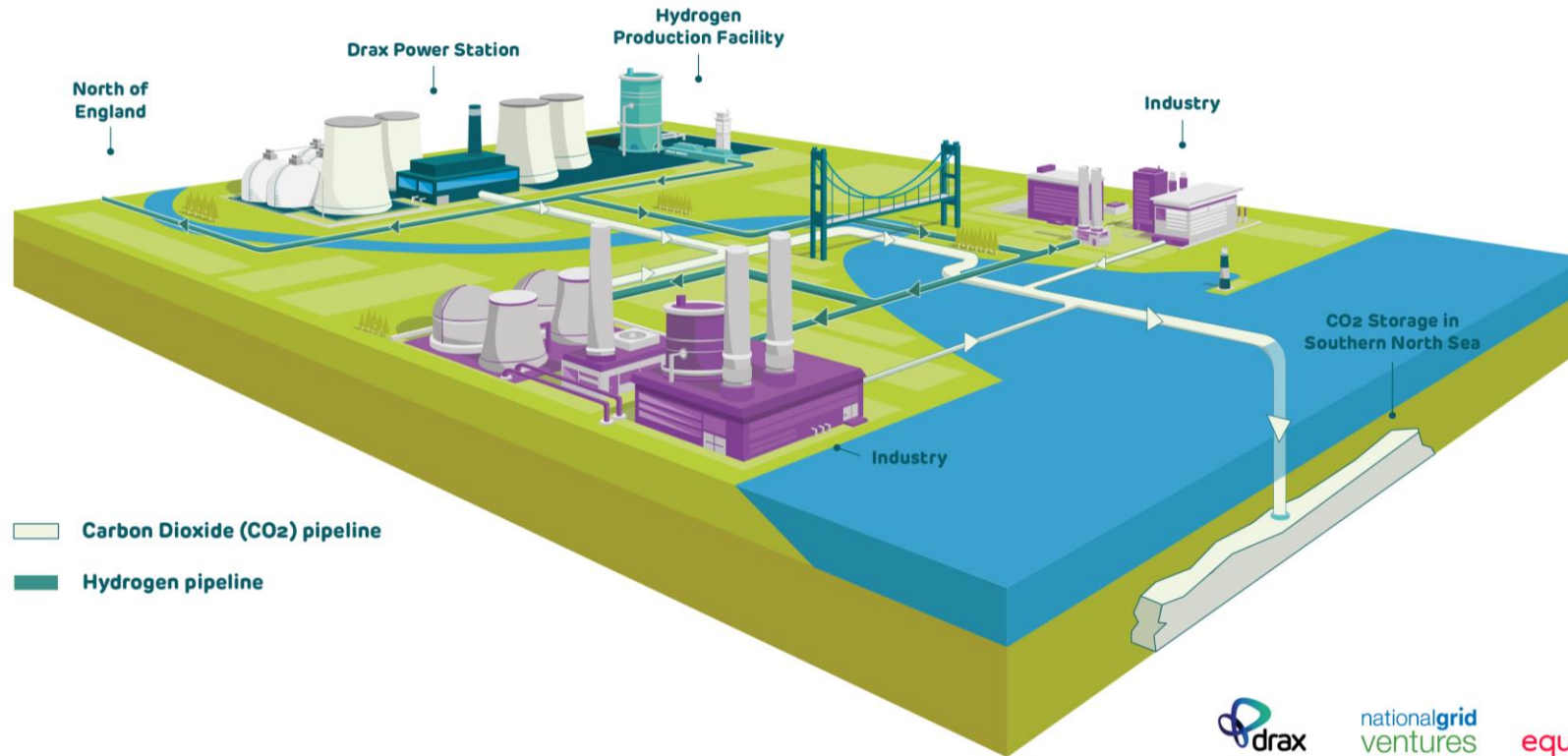
KEY:

- Flue gases
- C-Capture solvent
- CO₂

PROCESS:

- 1 Drax biomass flue gases injected into absorber containing C-Capture's solvent
- 2 The solvent 'collects' the CO₂ and is transferred to the next phase of the process
- 3 Heat is used to separate the C-Capture solvent from the CO₂
- 4 CO₂ is stored and utilised, whilst the C-Capture solvent is re-used

Creating a new low carbon economy in the Humber



Helping to ensure that no one is left behind

- As the world moves towards a low carbon economy Drax is helping to ensure that no one is left behind
- There are pockets of low social mobility on our doorstep
- There's a STEM skills shortage in the UK, and people from low income backgrounds face major barriers to pursuing STEM subjects and careers
- We have an important role to play - we've contributed over £200,000 this year
- Increased intake of apprentices, graduates and work experience
- Drax will help individuals reach their full potential and build a **diverse & inclusive** company

When students at school have **4** interactions with business they
are **5** times more likely to get a job

1,000,000

Mobilising a million

We've pledged to improve social mobility and opportunity for one million people by 2025.

Inspiring ambition, potential and education.

drax

Enabling a zero carbon,
lower cost energy future.

Addressing the causes...

“ Social mobility is about **breaking the link between an individual's parental background and their opportunities to reach their full potential** in terms of income and occupation ”

Causes of low social mobility include:

Lack of Essential Skills	Poor Access to Opportunities	Area-based Influences
<p>These skills are essential for securing jobs and hence are vital for social mobility</p> <p>Many of the ‘softer’ skills required by employers may be correlated with social class background rather than formal educational attainment</p>	<p>A lack of social bonds/networks, and role models through parent channels that would lead to meaningful work ‘experiences’</p>	<p>Localised environmental problems appear to combine with socio-economic disadvantage to produce negative influences on potential for social mobility e.g. inequalities in housing or access to transport</p>

Our Strategic Partnerships

Global

- UN Sustainable Development Goals



Drax represented on UN Global Compact UK Advisory Group

Governmental

- British Science Association All Party Parliamentary Group on D&I in STEM
- Careers & Enterprise Company (CEC)



Drax represented on CEC Employers' Advisory Group

National

- TeachFirst
- EngineeringUK
- WISE Campaign
- Business in the Community (BITC)
- Greenpower Education Trust



Drax represented on EngineeringUK Business & Industry Panel

Regional

- Galloway Glens Partnership
- Northern Powerhouse Partnership
- Earthworm Foundation

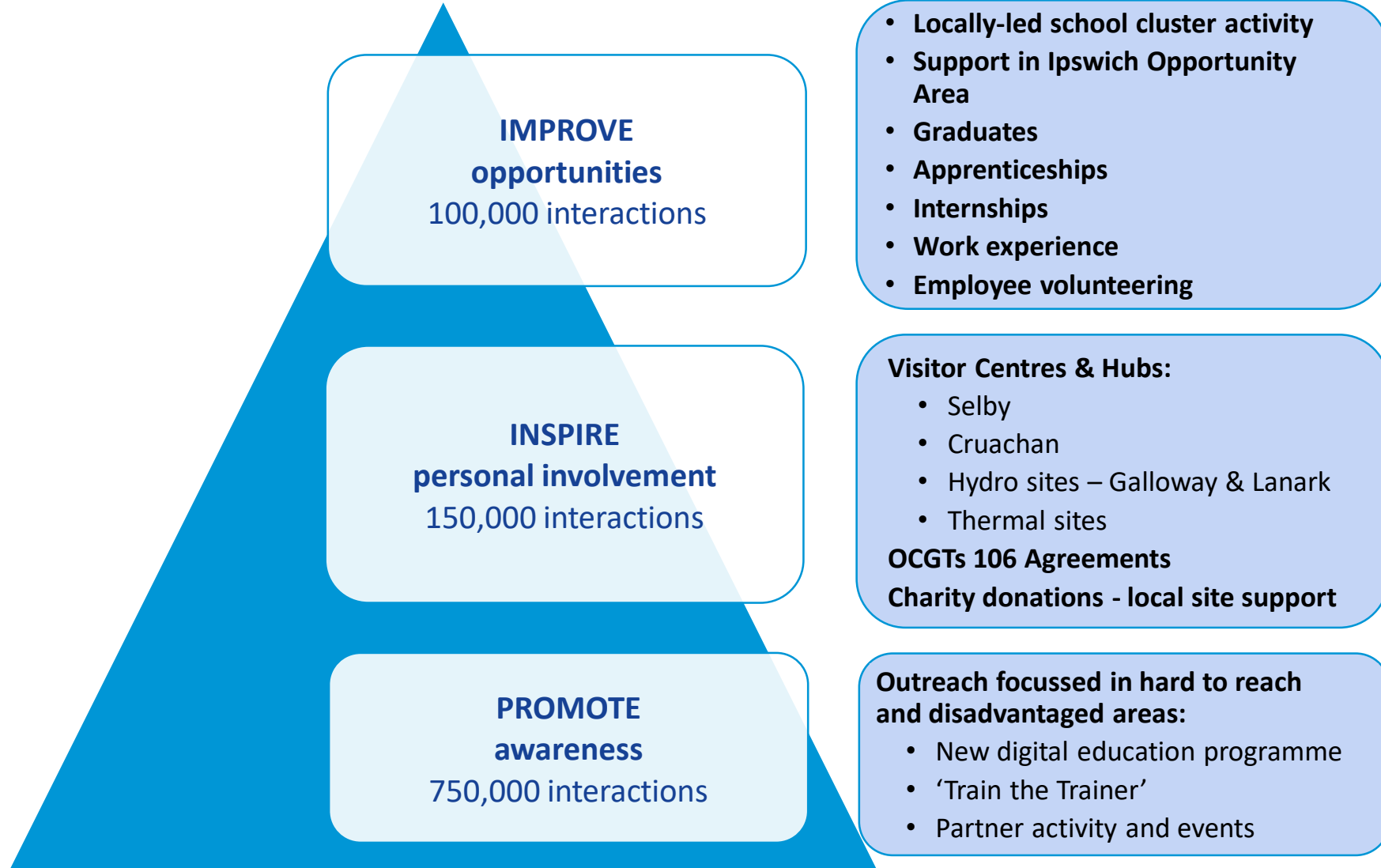


Local Activity



12 partner schools

Measuring Drax one million - three levels of engagement



IMPROVE
opportunities
100,000 interactions

- Locally-led school cluster activity
- Support in Ipswich Opportunity Area
- Graduates
- Apprenticeships
- Internships
- Work experience
- Employee volunteering

INSPIRE
personal involvement
150,000 interactions

- Visitor Centres & Hubs:**
- Selby
 - Cruachan
 - Hydro sites – Galloway & Lanark
 - Thermal sites
- OCGTs 106 Agreements**
Charity donations - local site support

PROMOTE
awareness
750,000 interactions

- Outreach focussed in hard to reach and disadvantaged areas:**
- New digital education programme
 - 'Train the Trainer'
 - Partner activity and events

Powering Past Coal Alliance

Finance Principles

**Helen Wildsmith – Stewardship Director,
Climate Change, CCLA**



PPCA Finance Principles

- Launched in the City of London during Climate Action Week in July

Summary:

- Cover Banking, Insurance and Investment
 - Emphasise alignment with the PPCA timelines
 - Advocacy for coal phaseout deadlines, but care re new relationships
 - Incorporate information provision and disclosure
 - Alignment with 'The Investor Agenda' and 'Climate Action 100+'
-
- Seven signatories to date, with similar numbers expected for COP25: Aviva Group; AXA Investment Managers; CCLA; Church Commissioners; Hermes; Schroders; and Storebrand.
 - Four Official Partners: Ceres (USA), Institutional Investors Group on Climate Change (Europe), Local Authority Pension Fund Forum (UK) and UN-backed Principles for Responsible Investment (Global)
 - See also: <https://poweringpastcoal.org/about/finance-principles>

Private sector investments to support coal regions in transition

Russell Bishop, Principal Economist
EU Platform for Coal Regions in Transition
17th October 2019



European Bank
for Reconstruction and Development

Who we are

Who we are

- **Supranational Institution** founded in 1991 owned by 65 countries, plus the European Union and the European Investment Bank

Our mission

- **To promote transition to open, market-based economies in our countries of operation** – we work in over 35 countries from central Europe to central Asia and the southern and eastern Mediterranean

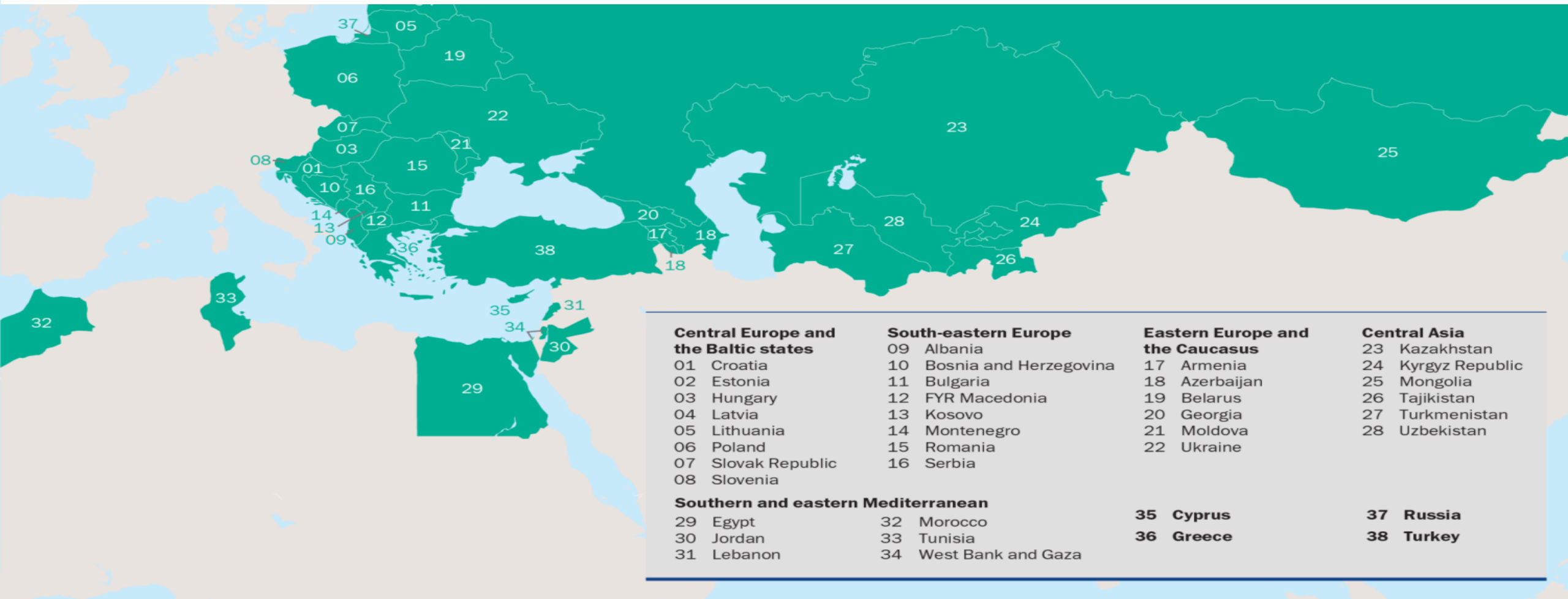
What we do

- **Support projects, mainly carried out by private sector clients**, in areas that are of interest and within the scope of the Bank. Annual Business Volume of the EBRD in 2017 was EUR 9,670 million, 412 projects signed, 71 per cent with private clients.

Where we invest



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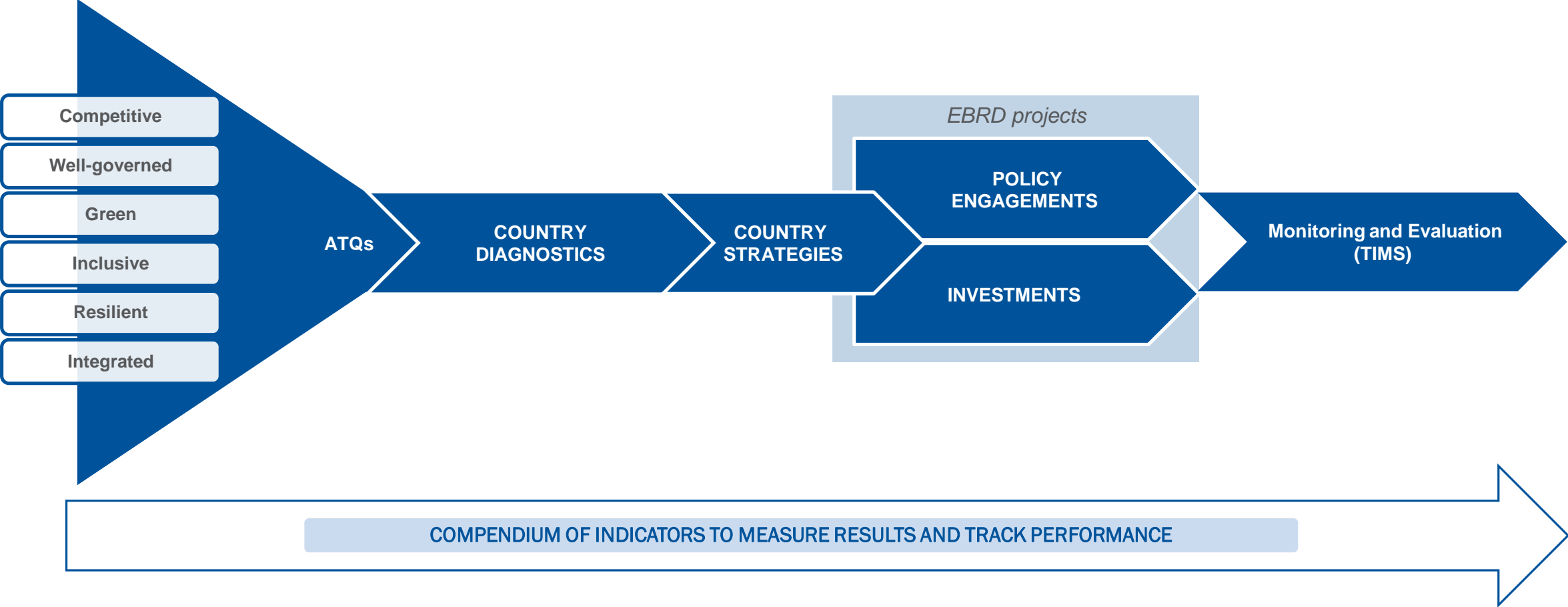


To foster open, market-oriented economies and support private initiative in the EBRD's countries of operations through investments based on:

- **Promoting transition:** Through projects that expand and improve markets, and help build the institutions that underpin the market economy
- **Sound banking principles:** Ensuring the project returns are commensurate with the risks
- **Additionality:** Financing projects which would not solely be funded by commercial banks
- **Sustainability:** Ensuring socially and environmentally sound development

As part of this approach, the EBRD has introduced a new transition concept based on **six key qualities of sustainable market economies – competitive, well-governed, green, inclusive, resilient and integrated**. Projects and policy dialogue supported by the EBRD must make a significant contribution to one or more of the six qualities.

Overview of the transition architecture



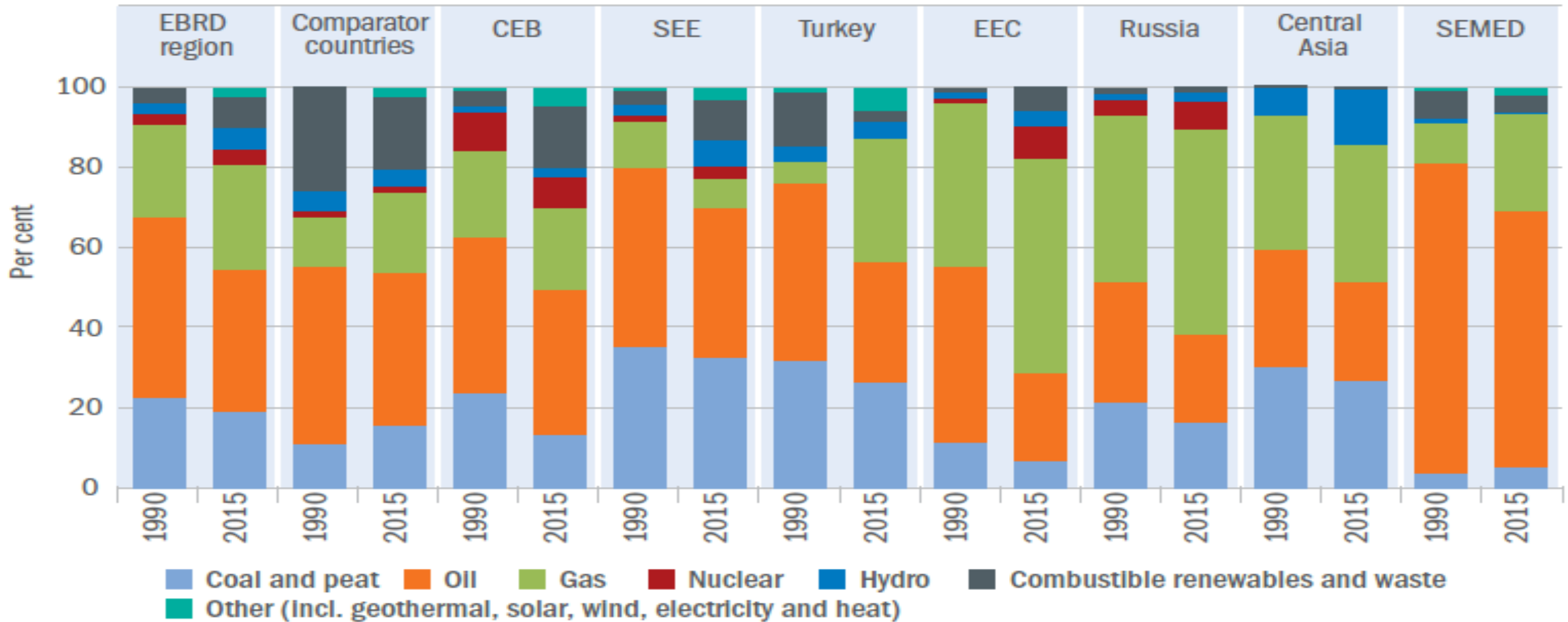
Coal regions in transition in EBRD CoOs

EBRD CoOs are reliant on the use of fossil fuels



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Breakdown of primary energy supply by fuel type



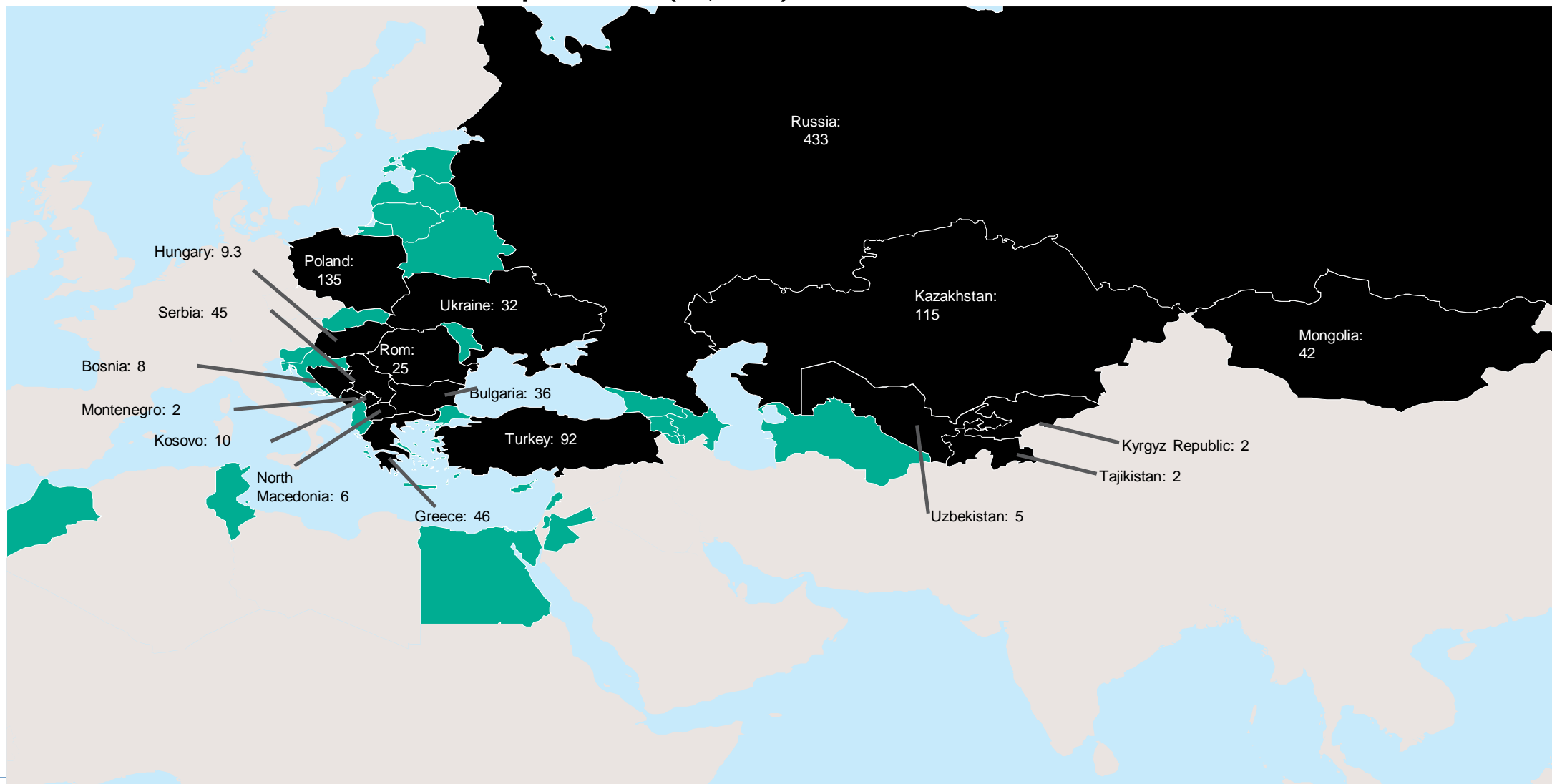
Source: EBRD (2017) 2017/18 Transition Report

The EBRD region also has significant coal resources



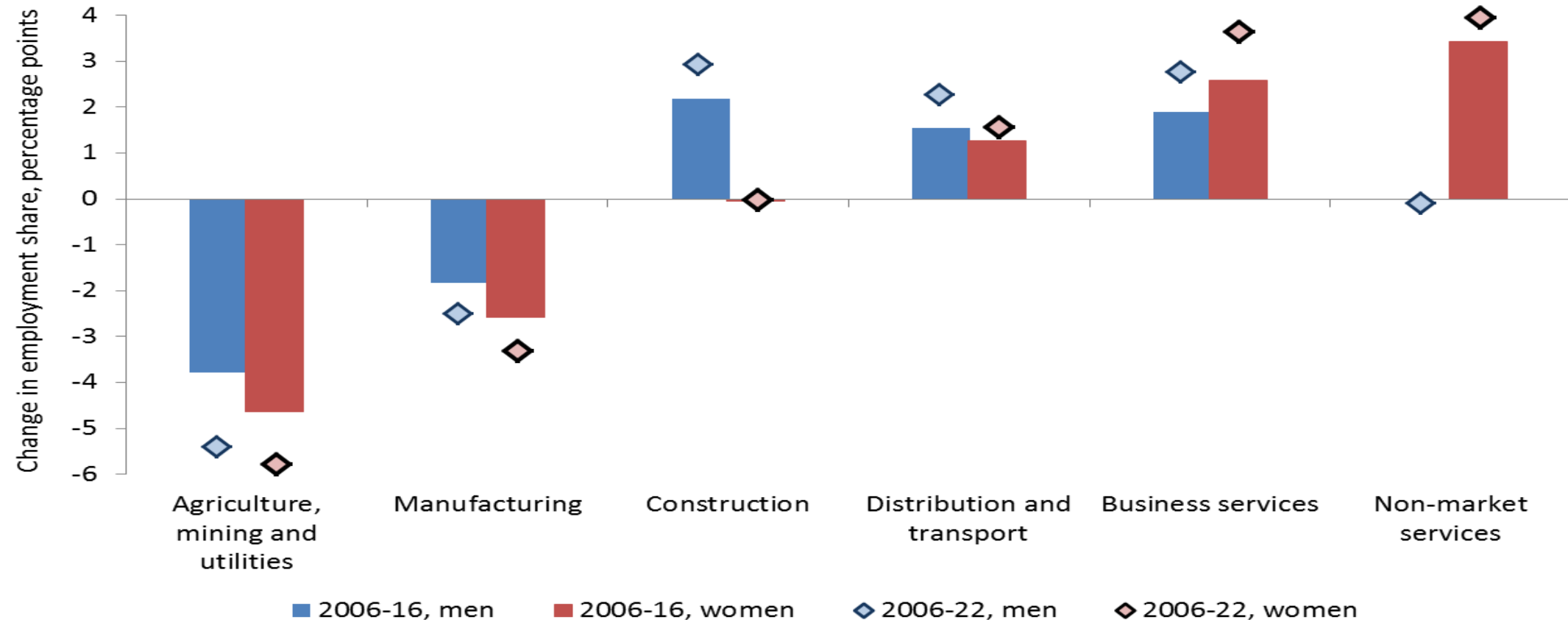
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Total current domestic mined thermal coal production (Mt, 2018)



The Green Economy Transition is occurring in parallel with de-industrialisation and shifting patterns of employment - giving insight into areas of future job growth ...

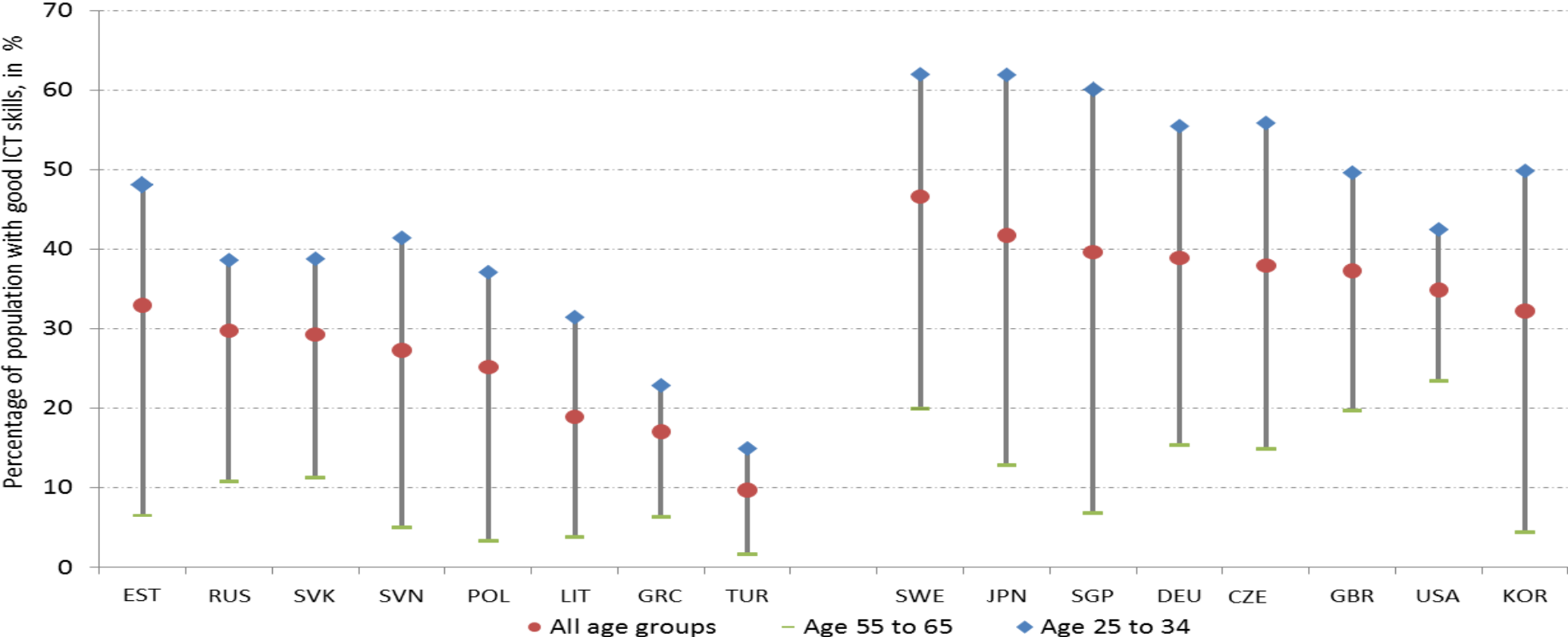
Changes in employment shares by industry, past and projected



Source: EBRD (2017) 2018/19 Transition report. From ILO and authors' calculations. Averages weighted by labour force. Non-market services comprise ISIC sectors O (public administration and defence), P (education), Q (health care and social work) and R, S, T, U (other services).

... which is likely to place emphasis on ICT skills which are weaker in EBRD regions...this could be a focus of the work on Just Transition

Share of population with good ICT skills in selected EBRD CoO, by age group



Source: EBRD (2017) 2018/19 Transition report. From OECD and authors' calculations. Good ICT skills correspond to level 2 or 3 results in PIAAC. Surveys conducted in 2011-14.

Supporting Private Sector Investment

Exact terms depend on specific needs and market conditions

	Debt (88%)	Equity (5%)	Guarantees (7%)
Typical size	€10mln + (less in less advanced countries)	€5-7mln + (less in less advanced countries)	Typically €50 ths – €50mln
Term	5-7 years (up to 10-15 years in case of infrastructure investments)	Typically from 3-7 years	1.5-2 (up to 3) years
Currency	Major foreign currencies as well as local currency		
Approach	Finance up to 35% of the project (60% with syndication)	Minority stake	Mainly through Trade Facilitation Programme
Structures	<ul style="list-style-type: none"> • Senior, subordinated or convertible, • Project finance • Floating or fixed rates 	<ul style="list-style-type: none"> • Portage equity finance • Risk equity 	<ul style="list-style-type: none"> • Import/export operations • Pure guarantees, cash advance trade finance
Applications	<ul style="list-style-type: none"> • Greenfield/Brownfield, JVs, • Capex for expansion/modernization, including resource efficiency improvements • Ownership change: acquisition, consolidation, privatisation • PPPs, etc. 		<ul style="list-style-type: none"> • Issues to international banks • Takes the risk of transactions of the banks in the EBRD's countries of operations

One starting point: what is holding back private investment?



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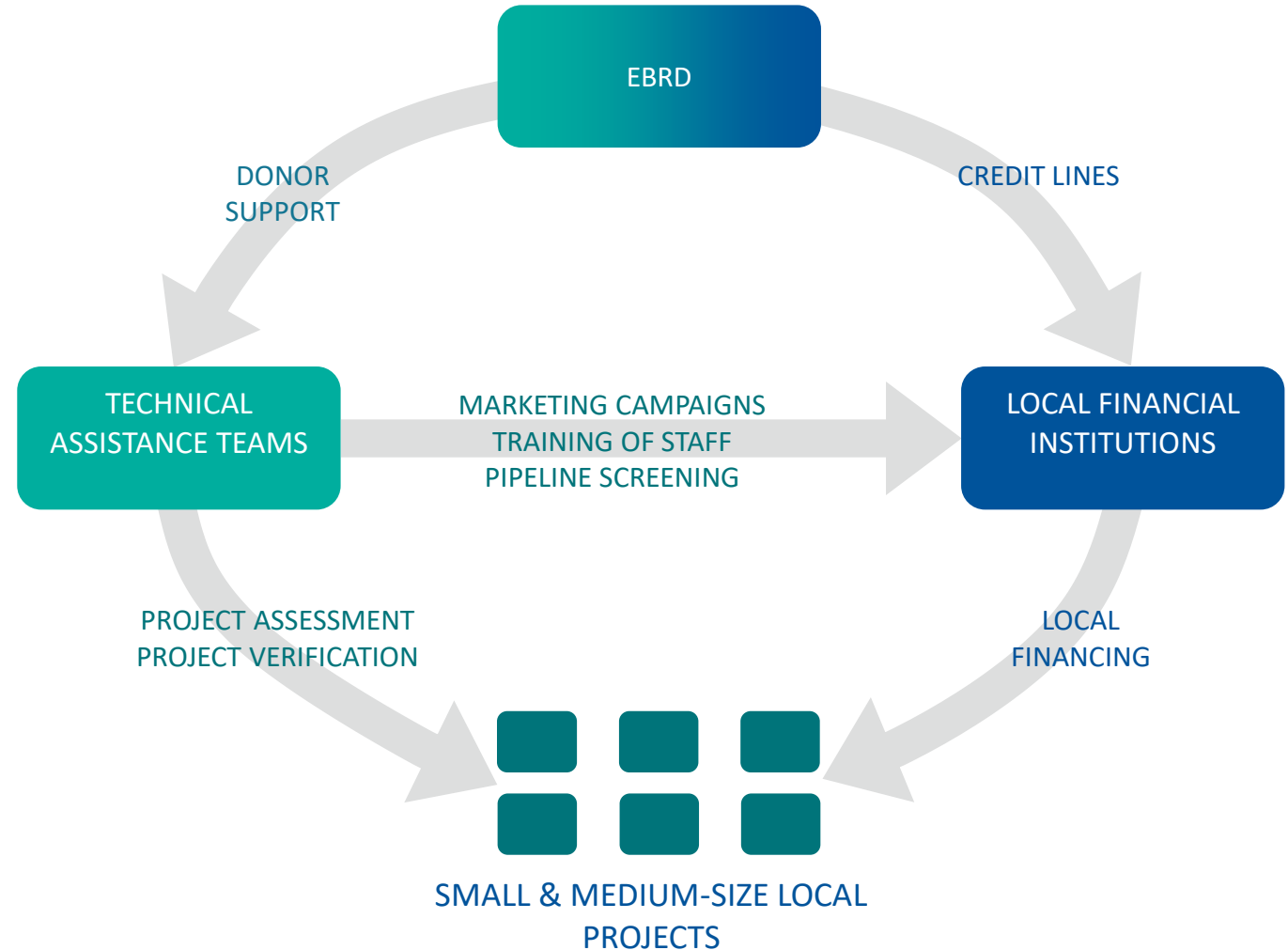
Obstacles to doing business by percentage who see major or severe obstacles

	ALB	BIH	MKD	KOS	MNE	SRB	Average
Competition from informal sector	19.9	16.0	34.6	58.9	11.2	12.6	25.5
Political instability	11.1	34.3	21.7	45.7	0.4	31.5	24.1
Corruption	17.0	26.4	13.3	51.0	3.2	24.5	22.6
Electricity	21.6	10.2	28.9	49.5	6.0	6.6	20.4
Tax rates	12.8	20.3	16.0	30.2	8.7	25.5	18.9
Access to finance	6.5	14.1	19.3	44.9	7.6	15.7	18.0
Tax administration	13.1	13.1	10.3	28.2	2.7	17.4	14.1
Crime, theft, disorder	3.8	7.2	9.1	46.6	4.1	7.4	13.0
Inadequately educated workforce	6.4	7.4	14.0	25.9	0.3	11.3	10.9
Customs and Trade regulations	2.0	5.7	6.6	34.2	3.0	4.9	9.4
Access to land	12.9	4.6	9.8	17.7	0.3	3.6	8.1
Telecommunications	3.1	4.9	16.3	13.0	4.0	3.9	7.5
Courts	1.5	8.2	6.7	13.0	1.1	13.9	7.4
Transport	4.1	3.7	5.4	22.7	2.0	4.6	7.1
Labour Regulations	1.8	11.1	4.0	4.9	0.4	6.9	4.9
Business licensing and permits	3.5	8.4	5.1	4.6	0.3	3.7	4.3

Source: BEEPS V.

Supporting investments via local banks: The Green Economy Financing Facilities

- **Efficient outreach to smaller projects**
Through GEFs EBRD extends credit lines to local financial institutions for on-lending to small and medium-sized projects.
- **Integrated approach**
Structured as country/region-specific “one-stop-shops” to include:
 - Credit lines for local financial institutions
 - Comprehensive technical assistance to enhance FIs’ project origination and assessment capacity
 - Concessional financing and grants to help overcome barriers (affordability, first-mover costs, early stage development of markets for advanced technologies, etc)
- **Sustainable market development**
In time, local commercial banks develop sustainable energy financing as a core business.



Managing existing assets: Supporting shift towards cleaner energy



Investment in 125 MW solar plant in Oslomej, North Macedonia

- First solar plant in the country. €5.9 million EBRD loan to construct first large-scale solar power plant and expand renewables.
- Redevelopment of coal mine site will help decarbonisation of Macedonian power sector.
- Client is ELEM (recently renamed ESM), the country's state-owned electricity company.
- Country aims to generate 23 per cent of electricity from renewables by 2020.
- Modular and pilot approach to scale up investment through time.
- Further support for decarbonisation and renewable energy targets comes in the shape of EBRD technical assistance in designing competitive renewable tenders for 200 MW of solar capacity and 150 MW of wind power capacity.

Access to Employment and Skills: Youth / Regional Inclusion in Manufacturing

- There is a **substantial mis-match** between the skills acquired by young people in schools and the demands of the labour market: youth unemployment co-exists with large numbers of unfilled jobs.
- **Private sector led approach:** EBRD enables Tofas to improve apprenticeship and traineeship opportunities for **1,200 blue collar workers and train 20 teachers** at local schools to enhance teaching quality.
- **Support for** the introduction of improved job-based learning and skills verification opportunities and internal capacity building at Tofas.
- Linked to **inclusion policy engagement** to enhance private sector participation in skills standards development with Ministry of Education and Ministry of Labour.



Supporting local business to grow: EBRD small business initiative



A fifth of the EBRD's annual Bank investment and almost half its banking projects each year are directed at SME's.

Around 1.5bn is channelled each year to 200,000 businesses.

Local currency lending.

5 pillars

- Financing through financial institutions – example the EBRD Women in Business program
- Co-financing with financial institutions
- Direct financing
- Business advice – nearly 2000 a year receive such advice which results in increased revenues and jobs.
- Policy dialogue