FINTECC: Finance and Technology Transfer Centre for Climate Change

01 October 2015

European Bank
for Reconstruction and Development

Introduction to the EBRD

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The EBRD is a **triple-A** rated* bank with a capital base of **€30 billion**.

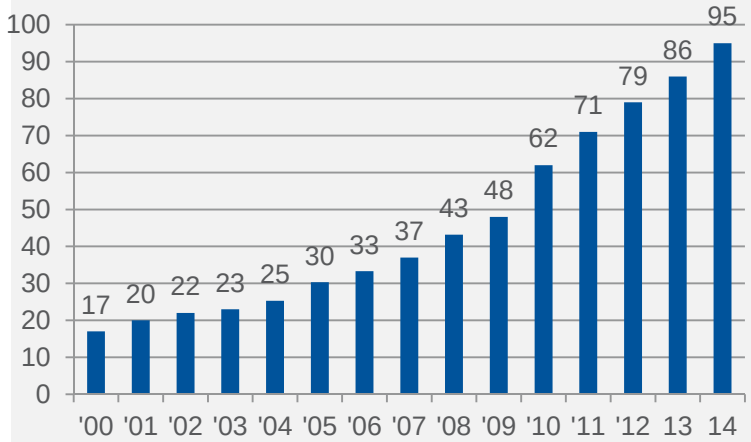
Operating in **35 countries** from central Europe to central Asia, the EBRD:

- Promotes transition to market economies
- Mobilises foreign direct investment
- Improves people's lives through enhancing municipal services
- Encourages sustainable development

The EBRD is owned by **65 countries** and two inter-governmental institutions.

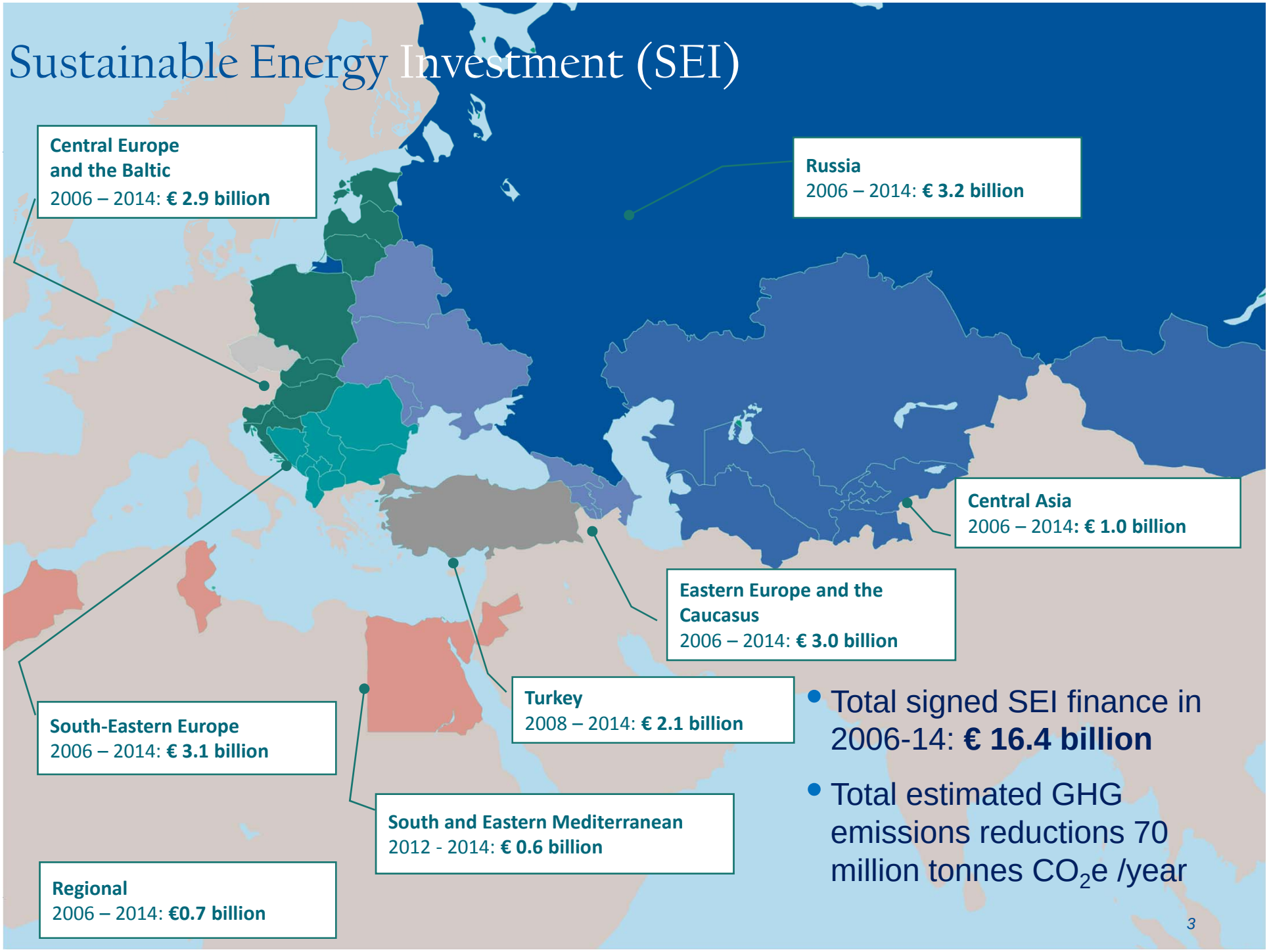
* From all three main rating agencies (S&P, Moody's and Fitch)

The EBRD's annual business volume 2000-2014 (cumulative, EUR in billion)



Note: Unaudited as at 31 December 2014

Sustainable Energy Investment (SEI)



- Total signed SEI finance in 2006-14: **€ 16.4 billion**
- Total estimated GHG emissions reductions 70 million tonnes CO_2e /year

SEI Finance since 2006, by Business Area

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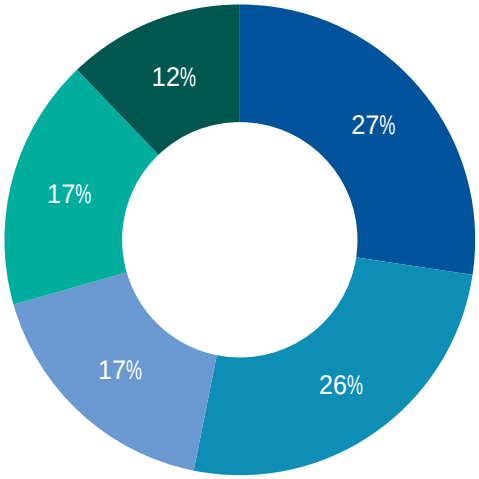

BUSINESS AREA	(€ bn)
Corporate energy efficiency	4.5
Cleaner energy production	4.2
Renewable energy	2.9
Sustainable energy financing facilities	2.8
Municipal infrastructure & energy efficiency	2.0
Total	**16.4**

FINTECC

Finance and Technology Transfer Centre for Climate Change

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- Part of a global technology transfer initiative created at COPs 13 and 14.
- Aims to improve deployment rates of the best available climate technologies in markets where deployment is very slow compared to others.

GEF FUNDING IN EARLY TRANSITION COUNTRIES			
CAPITAL GRANTS		TECHNICAL SUPPORT	
Mitigation	Adaptation	Mitigation	Adaptation
USD 6.55 million	USD 1.3 million	USD 2.54 million	USD 0.5 million

EBRD SSF FUNDING IN SEMED (MITIGATION AND ADAPTATION)	
CAPITAL GRANTS	POLICY DIALOGUE AND TECHNICAL SUPPORT
EUR 5 million	EUR 0.5 million

KAZAKHSTAN: RESET programme running, with USD 6 million of funding from the GEF for incentive grants

UKRAINE: Launching FINTECC in Ukraine with support from the GEF and the NIF

Early Transition Countries (ETCs):
Armenia, Azerbaijan, Belarus, Georgia, Kyrgyz Republic, Moldova, Mongolia, Tajikistan, Turkmenistan and Uzbekistan

Southern and eastern Mediterranean (SEMED) countries:
Egypt, Jordan, Morocco and Tunisia

FINTECC addresses some key barriers to climate technology deployment

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Lack of reliable baseline information on market penetration	There is limited availability of reliable information on technology baseline in individual countries and sectors, limiting the ability of both private sectors and policy makers to make well informed decisions.
Lack of knowledge, awareness and absorption capacity of businesses	Often results in perception of high risk, low profitability, and high transaction costs. The companies lack in-house capacity to develop bankable projects and may not have possibility to acquire such expertise in the market.
Lack of adequate regulatory framework to incentivize technology transfer	Regulatory frameworks not conductive to technology transfer, e.g. no labelling of products available in most of the cases.
Limited availability of financial instruments suitable for financing technology transfer	There is a limited number of financing instruments available to support technology transfer, in particular those instruments working alongside standard financing.
Underdeveloped supply chains with limited competition	Underdeveloped supply chains with lack of competition among suppliers, limited availability of technology solutions, and limited market for engineering / maintenance service providers

FINTECC business model

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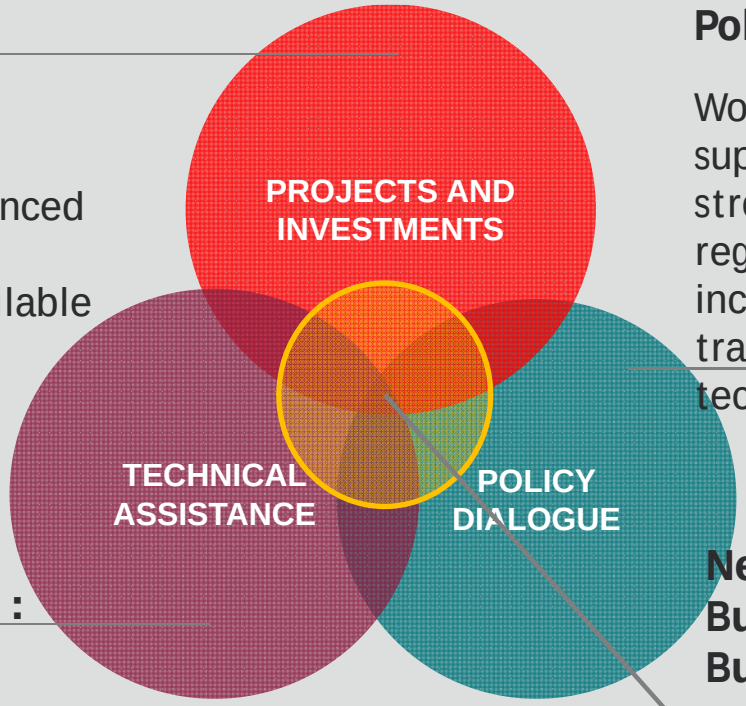
Financial support for projects:

Needs based incentives for demonstration projects financed by the EBRD, incentivizing implementation of best available technologies in the specific sector and country.



Policy Dialogue:

Working with governments to support development of a strong institutional and regulatory framework that incentivises technology transfer and climate technology deployment

Technical Assistance (TA) :

Development of market monitoring tools and techniques, project assessment tools and methodologies together with a needs-based technical assistance for individual projects.

Networks, Insights, Capacity Building and Market-Building:

Establishment or support to networks promoting technology transfer, organization of stakeholder events and sharing information on climate technology markets.

Non-TC grants: Case Studies, and status

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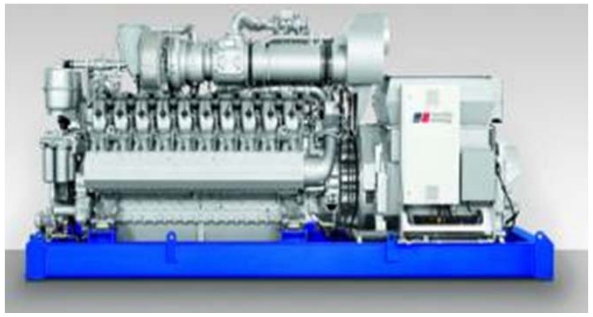
12 signed transactions, incentives worth USD 1.9m, supporting USD 30m of SRI investments. Transactions benefiting were in Agribusiness (4), M&S (5), Natural Resources (1), Corporate (1), and Property and Tourism (1)

Workshop and showroom, ETC

Technologies considered: tri-generation, clean burn boiler, water recovery and re-use, variable refrigerant flow cooling system complemented with BEMS, LED lighting.

Grant: USD 360,000
SEI investment: USD 6.3 mil
EBRD transaction: USD 13 mil



Bear Beer, Kyrgyz Republic

Technologies supported: CO_2 recovery system in fermentation and EMS.

Grant: EUR 127,327
SEI investment: USD 1.1 mil
EBRD transaction: USD 9.5 mil

Manufacturing facility, SEMED

Technologies supported: Rooftop PV, Energy Storage, Heat Recovery, Building Insulation, EMS, ISO 50001.

Grant: EUR 380,000
SEI investment: EUR 2.2 mil
EBRD investment: EUR 4.6 mil

FINTECC Policy Dialogue

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PRIORITY AREAS IDENTIFIED

1. Preparation of **National Energy Efficiency Action Plans (NEEAP),** which identify areas of energy efficiency potential; establish energy saving targets; prioritise energy efficiency actions; mobilise resources; establish accountabilities; and put in place monitoring and evaluation procedures.

2. Creation of **Energy Performance Standards and Labelling schemes**, such as by helping adapt the EU's Eco-Design and Eco-Labelling Directives.

   - IEA: over 1,300 mandatory and voluntary energy efficiency standards with estimated savings of over 500 TWh each year – approximately equivalent to the total electricity consumed by all homes in the United Kingdom and Japan combined.

3. Developing associated **Standards & Labelling Monitoring, Verification and Enforcement** processes.

   - IEA: over 4,000 TWh (~ 2,000 MtCO2), may be lost globally between 2010 and 2030 due to technologies that do not comply with government minimum energy efficiency standards.

FINTECC Insights
Incremental cost Assessment, Ukraine*

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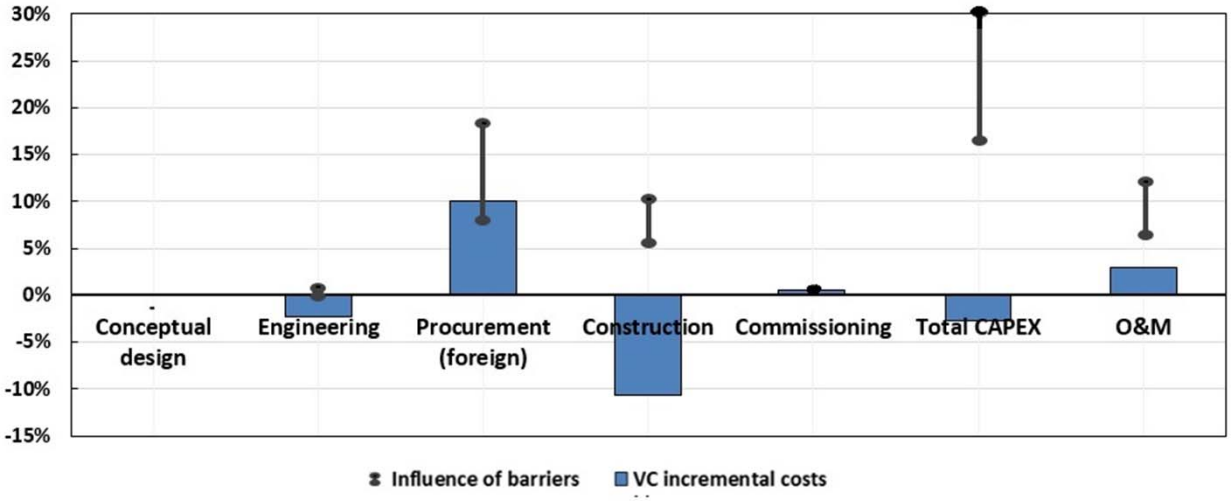

Incremental cost assessment for gas motor CHP project in Ukraine

TECHNOLOGY DEPLOYMENT BARRIERS IDENTIFIED

1. Lack of domestic producers
2. Lack of EPC contractors
3. Extremely high costs of financing
4. Underdeveloped biomass supply chains
5. Lack of capacity among service industries
6. Inadequate policy framework

* Developed with Larive as part of PPG activities for FINTECC Ukraine, funded by the GEF

FINTECC Insights
Market Penetration Assessment, Ukraine*

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(Back pressure) Steam Turbines level of penetration and investment potential

(Sub)Sector	Total installed, MWe	Penetration level (UA)	Total potential capacity, MW	Investment potential, million euro
Agroindustry				
Oil & Fat	14.20	1.4%	500.04	125.01
Industry				
Chemicals	6.00	0.2%	3,396.00	543.36
Metallurgy	56.00	6.0%	877.33	140.37
Plastics & polymers	12.00	0.8%	1,470.00	235.20
Pulp & paper	6.00	1.8%	324.00	51.84
Mining	12.00	0.3%	4,752.00	760.32
Grand Total	**106.20**		**11,319.38**	**1,856.10**

* Developed with Tebodin as part of PPG activities for FINTECC Ukraine, funded by the GEF

FINTECC Insights – Market Penetration Methodologies (IEA and FAO)

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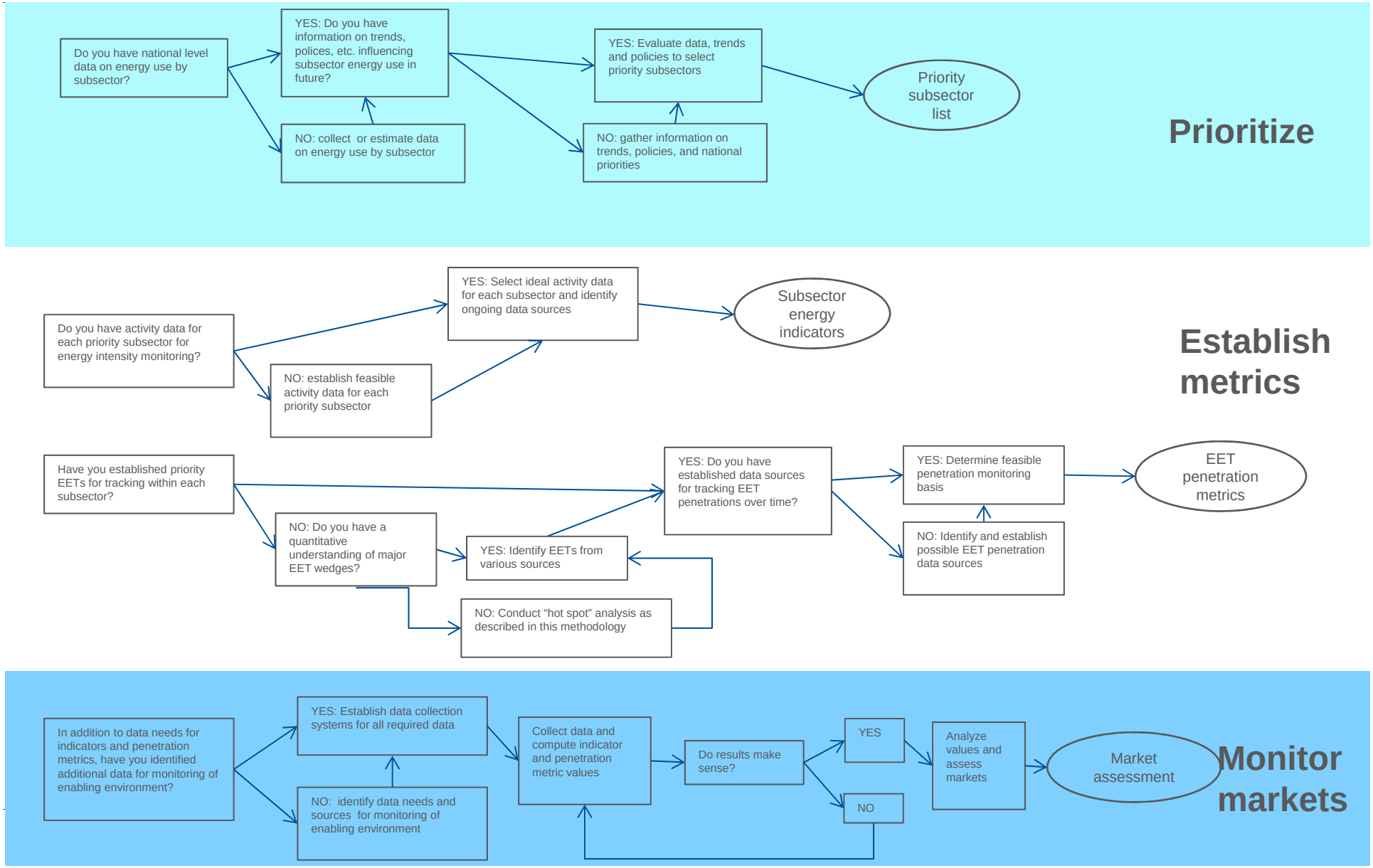

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