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INDUSTRIAL DEVELOPMENT ORGANIZATION



UNIDO Industrial Energy Efficiency Programme and Ukraine Loan Guarantee Fund

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UNIDO Global Industrial Energy Efficiency Programme



GLOBAL ENVIRONMENT FACILITY
INVESTING IN OUR PLANET

Operational in 26 countries

Projects

South Africa	Mexico
Moldova	Myanmar
Russia	India
Turkey	Georgia
Ecuador	North Macedonia
Malaysia	Pakistan
Thailand	Morocco
Viet Nam	Cuba
Philippines	Nigeria
Indonesia	Sri Lanka
Egypt	Ghana
Iran	
Ukraine	
Colombia	

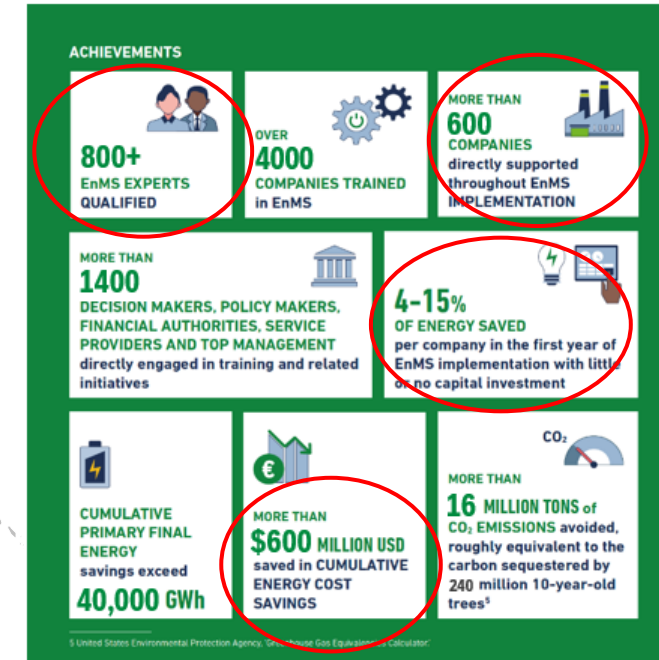
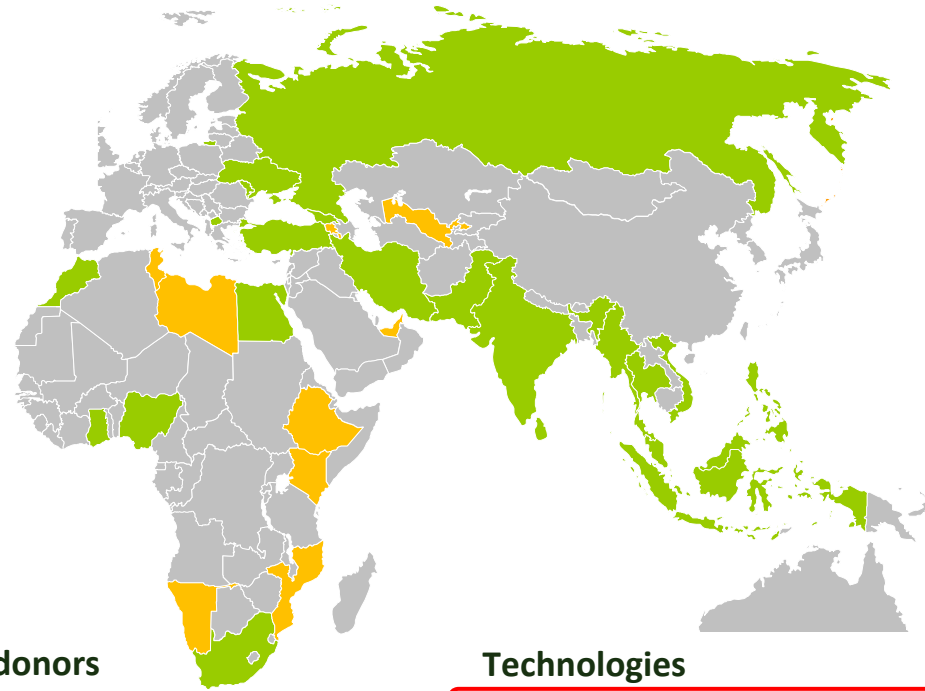
Discussing activities

Other donors

- ✓ Government of South Africa
- ✓ Swiss Secretariat for Economic Affairs
- ✓ UK Dept. for International Development
- ✓ Government of Italy
- ✓ Government of Austria
- ✓ European Union
- ✓ Green Climate Fund
- ✓ Government of Colombia
- ✓ Others

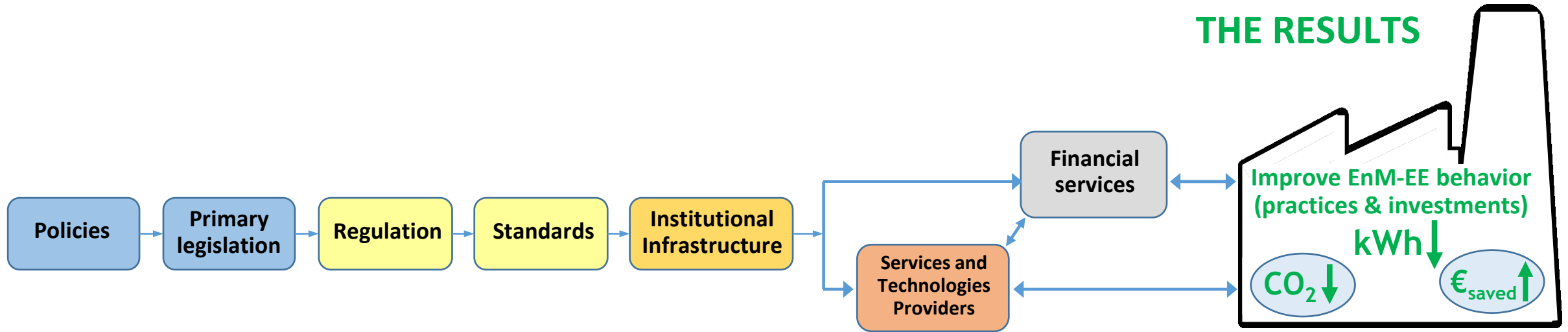
Technologies

- ✓ Energy Management Systems – ISO 50001
- ✓ Industrial Steam Systems
- ✓ Industrial Compressed-air Systems
- ✓ Industrial Fan and Pump Systems
- ✓ Other Industrial Motor-driven Systems
- ✓ Industrial Refrigeration Systems





Market transformation and value chain for IEE-EnMS-ESO



UNIDO supported measures

- Financial incentives
- IEE legislation
- National EnMS/ISO 50001 professional qualifications
- IEE best-practices promotion and dissemination platform
- Recognition/Award programs
- Institutional capacity building
- Voluntary agreement schemes

UNIDO Activities

- Trainings for Certification Bodies and Accreditation Bodies
- ISO 50001 Lead Auditor Training
- Licensing of training and other resources to CBs
- IEE regulation

UNIDO Activities

- Awareness raising
- User-level training
- Expert-level training & UNIDO qualification
- Partnership with power utilities
- Partnership with universities
- Support to EnMS services promotion and offer

UNIDO Activities

- Awareness raising & training
- Technical Assistance Facility
- Performance-based grant co-financing
- Loans Guarantee Schemes

UNIDO Activities

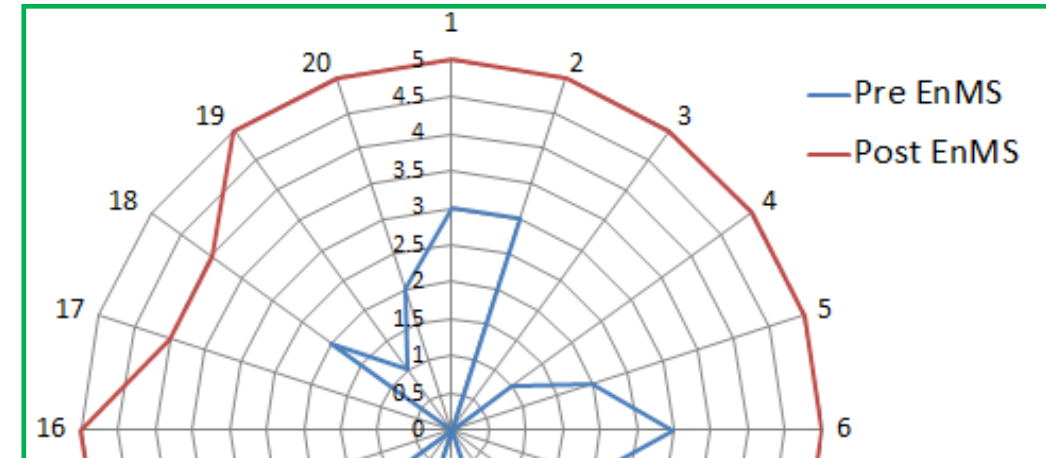
- Awareness raising
- User-level training
- Expert-level training & UNIDO qualification
- Expert support for EnMS-ISO 50001 implementation
- Expert support for energy systems assessment and optimization



Energy management and performance impact story

Vardar Dolomit – North Macedonia

- Production of fire-resistant materials based on sintered dolomite
- 85 employees
- 3.3 GWh annual consumption of electricity in 2015
- 29.3 GWh annual consumption of oil & mazut in 2015

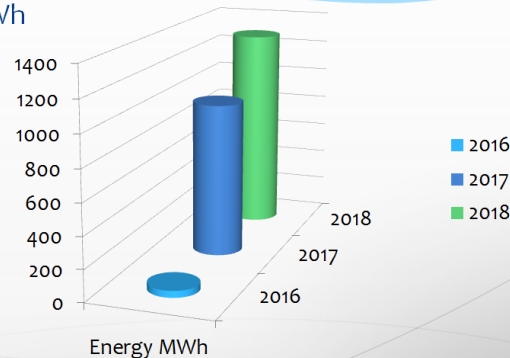


Key achievements of EnMS implementation



* Energy Reduction MWh

- * 2016 43MWh
- * 2017 980MWh
- * 2018 1287MWh



Key achievements of EnMS implementation



* Savings VS Investment 1000 EUR

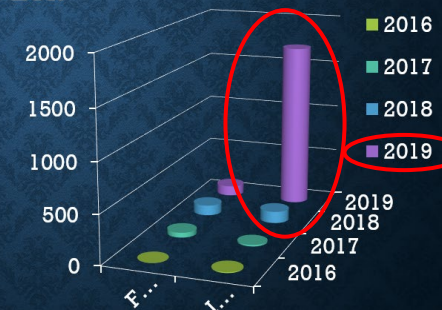
- | * SAV | INV |
|---------|-------|
| * 3.1 | 8.7 |
| * 50.3 | 15.5 |
| * 105.7 | 120.6 |



РЕЗУЛТАТИ ОД ИМПЛЕМЕНТАЦИЈА НА ENMS

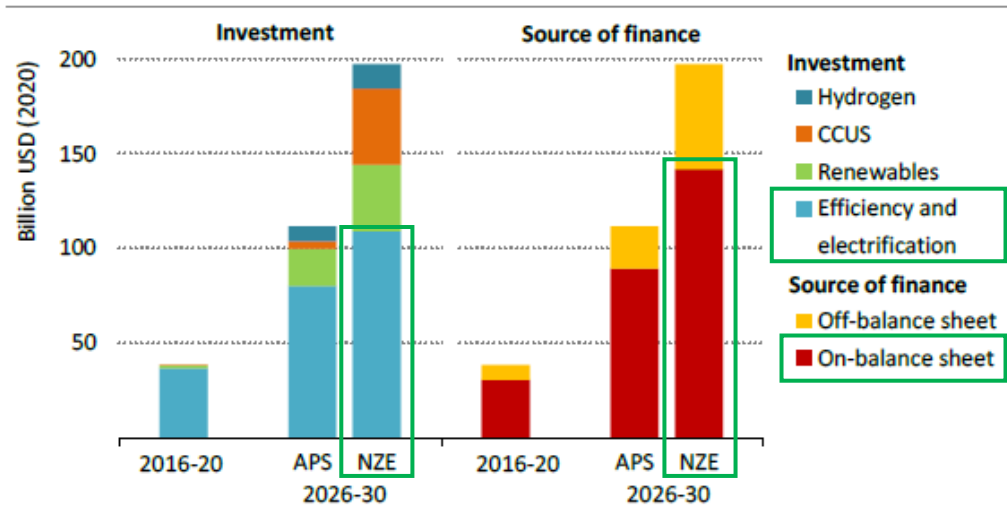
Заштеди VS Инвестиции x1000 EUR

3.1	8.7
50.3	15.5
105.7	120.6
104.6	1 700



EnMS to drive investments in energy/carbon performance improvement

Figure 3.19 ▶ Average annual clean energy investment in industry by type and source, 2016-2020, and by scenario, 2026-2030



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Meeting NZE milestones requires investment in industry to increase fivefold by 2030, supported by new financing options in technologies critical for industrial decarbonisation

Note: The source of finance indicates investment financed on the balance sheet of the industrial company, as well as those using off-balance sheet arrangements, such as project or third-party finance.

Source: IEA World Energy Outlook 2021

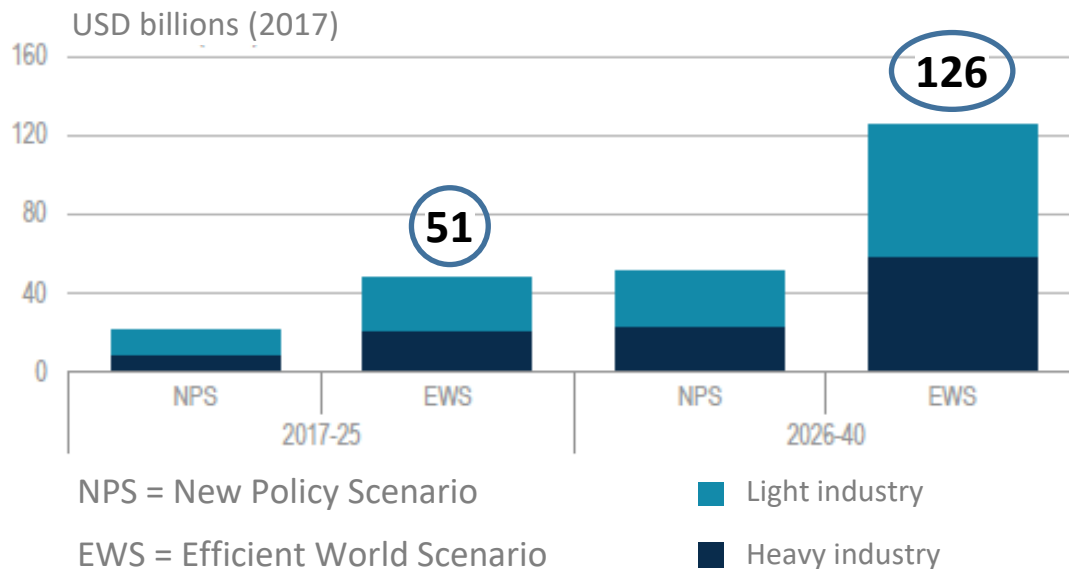
- ✓ Energy efficiency investments/loans still largely treated by banks as on-balance sheet projects
- ✓ Energy efficiency investments compete with other business priorities for industrial companies' resources

Energy management systems are key to build companies' competencies, processes and confidence to de-risk and increase investments in energy efficiency



Ukraine Loan Guarantee Fund for IEE – WHY?

Average annual industrial energy efficiency investments in the NPS and EWS,
2017-2040



Source: IEA 2018

- i. Increase access of Ukrainian industrial enterprises to financing for IEE and at more favorable terms
- ii. Support financial innovation for industrial EE
- iii. Strengthening expertise and building practical experience of Ukrainian financial and services sectors with IEE investments
- iv. Further support Ukrainian IEE market transformation and acceleration



Ukraine Loan Guarantee Fund for IEE – Operations

- **1.5 mio USD portfolio guarantee**
- **Target companies/borrowers**
 - SMEs and large companies from Ukraine manufacturing sector
 - Energy service companies implementing projects in industrial companies
- **Loan uses**
 - Implementation of ISO 50001 EnMS, including 3rd party certification
 - Implementation of industrial energy efficiency projects and technology upgrades
- **Loan Currency** – Ukrainian hryvnya (UAH), Euro (EUR) and US Dollar (USD)
- **Guarantee** – 100 % of loan principal up to 500,000 USD equivalent
- **Loan Size** – Up to the bank and the borrower
For loans with principal up to 500,000 USD collateral NOT required
- **Loan Interest** – 13% UAH, 4.5% USD; 4% EUR
- **Guarantee validity** – 24 months (maximum during pilot operations)



LGF OPERATIONS

- Launched in July 2020, amended once
- 5 loans issued (total investment > 9 mio USD)
- Reached 1.5 mio USD of LGF cap
- No LGF loan has defaulted so far
- **UNIDO working on LGF sustainability**



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Thank you for your attention!

For more information:

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