

ENERGY EFFICIENT BUILDING REFURBISHMENT IN MONGOLIA

Technical Cooperation Project | 2019-2021



Implemented by





AGENDA



Background



GIZ Engagement in
Energy Sector



Success Stories



Implemented by



MONGOLIA THE LAND OF THE BLUE SKY



Population
3.2 Million

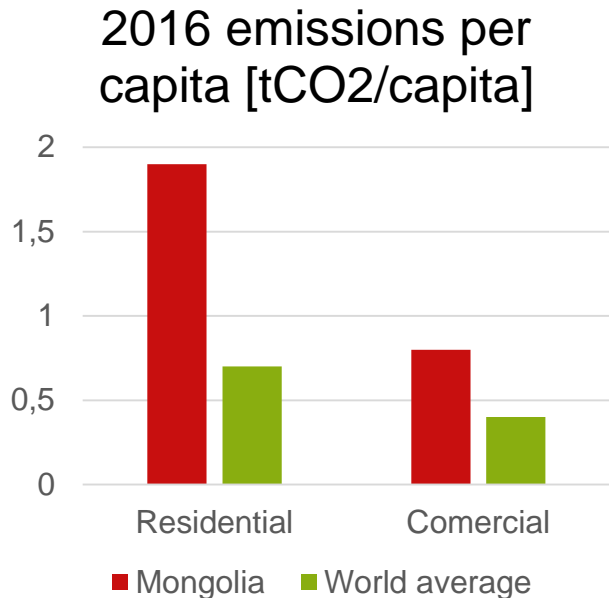
Area Size
1.56 Million km²

**Average Winter
Temperature**
-20 degrees C

MONGOLIA THE LAND OF THE SMOG SKY



EMISSIONS FROM BUILDINGS



High coal dependency



Over 70% of heat from CHPs go to building sector



Energy demand projected to increase by 2030



CHALLENGES IN THE BUILDING SECTOR



Old Infrastructure



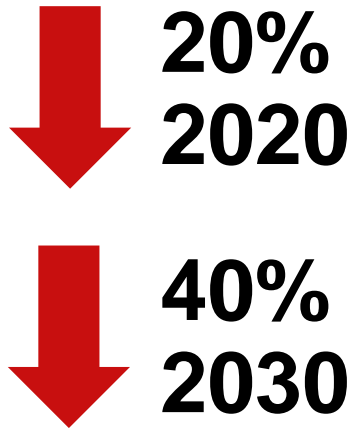
Low Energy Tariffs
Little Investments



High dependency
on coal

GOVERNMENT ACTIONS

Heat Loss Targets:



Approved Policies/ Strategies:

Energy Conservation Law
(November 2015)

National Energy Efficiency Improvement Program
(September 2017)

State Policy on Construction Sector
(February 2019)

Mongolian Sustainable Development Vision 2030

Mongolia's Nationally Determined Contributions
(NDC)

ENERGY EFFICIENT BUILDING REFURBISHMENT IN MONGOLIA PROJECT (EEP)



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Schweizerische Eidgenossenschaft
Confédération suisse
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Swiss Agency for Development
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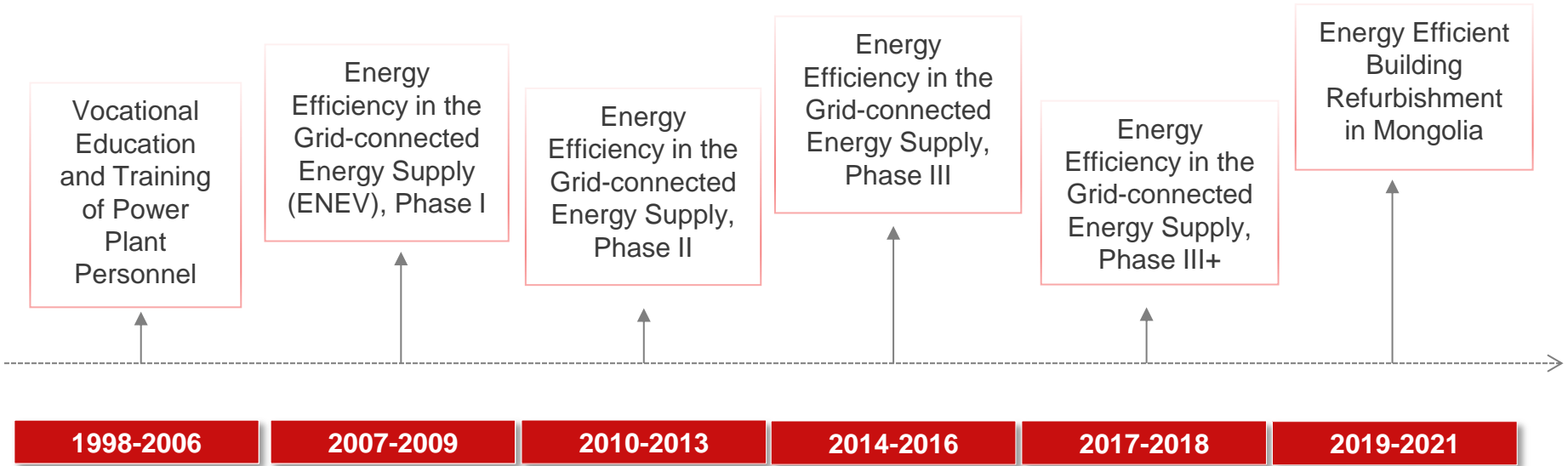
MINISTRY
OF
ENERGY



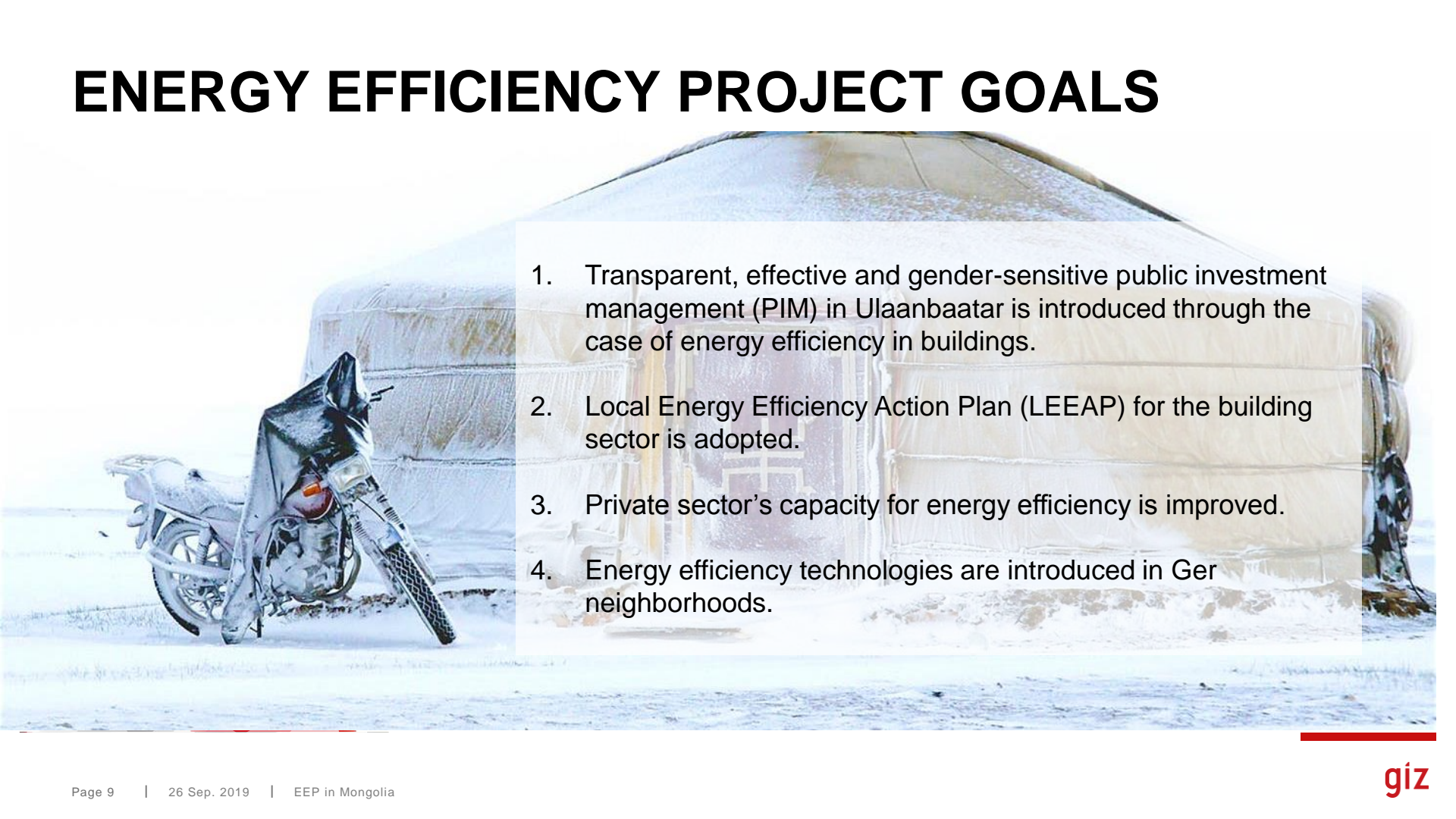
Overall Term
2019 to 2021

Budget
6.9 m Euro

GIZ ENGAGEMENT IN THE ENERGY SECTOR



ENERGY EFFICIENCY PROJECT GOALS

- 
1. Transparent, effective and gender-sensitive public investment management (PIM) in Ulaanbaatar is introduced through the case of energy efficiency in buildings.
 2. Local Energy Efficiency Action Plan (LEEAP) for the building sector is adopted.
 3. Private sector's capacity for energy efficiency is improved.
 4. Energy efficiency technologies are introduced in Ger neighborhoods.

ENERGY EFFICIENCY PROJECT

MACRO-MESO-MICRO LINKAGES



POLICY AND PROCESS CONSULTING

Energy Conservation Law, Financing arrangements, Tariffs

CAPACITY DEVELOPMENT

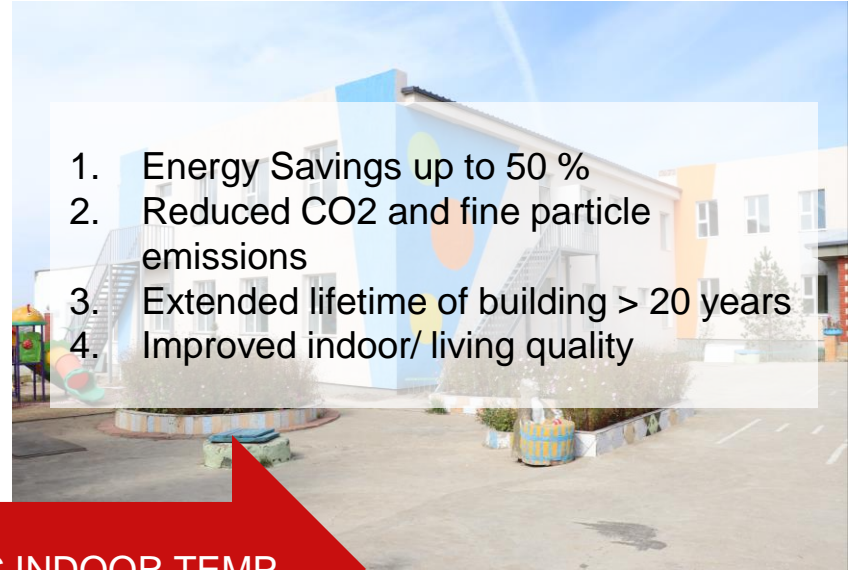
Institutions, Service providers, Credit facilities

TECHNOLOGY TRANSFER

Piloting, Market take-up, Replication



ENERGY EFFICIENCY PROJECT



1. Energy Savings up to 50 %
2. Reduced CO₂ and fine particle emissions
3. Extended lifetime of building > 20 years
4. Improved indoor/ living quality

FROM 10-18°C to 22°C INDOOR TEMP

ENERGY EFFICIENCY PROJECT



Reduction of absents
due to illness by 1/3



Reduction of absence
due to illness by
around 74%



Reduction of medical
costs and lost work
opportunities.



Enhanced desire to
attend the school;
Improved performance;
More active

ON SUSTANABILITY

SOCIAL

improved quality of life
improved health
fewer sick leaves

ECONOMIC

higher income /
household
reduced heat costs
financing options for
investments in energy
efficiency

ENVIRONMENTAL

heat loss in buildings
reduced use of coal
less air pollution



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MINISTRY
OF
ENERGY



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