ENERGY EFFICIENCY FUND

The Ministry of Regional Development, Construction, Housing and Communal Services of Ukraine

2016
HEATING IS THE LARGEST SEGMENT OF UTILITY SERVICES

6,5 mln households in private homes
7,8 mln households in multistory buildings
240 ths total number of multistory buildings

Source of payment for HUS in 2015 (UAH bln)

2015
83 UAH bln

2017
136 UAH bln

HUS market structure for population

Centralised heating
Gas heating
Other

Source: Minregion data, analysis of the Working Group
18 BCM OF GAS CONSUMED FOR HEATING PURPOSES

~50% imported gas

~45% of gas consumed for heating

~80% heat generated from gas

*Estimate of the annual gas consumption is made based on regular temperature in the heating season and moderate recovery of the industry

Source: analysis of the Working Group
HOW POPULATION “PAYS” FOR HEAT

TWO SOURCES OF SETTLEMENTS BETWEEN POPULATION AND DHCs:

Payments of population (cash)

Subsidies for utility services (clearing)

NUMBER OF SUBSIDY RECEIVERS, MLN

INCREASING OF SUBSIDIES SPENDING, BLN

Source: data of Ukrstat, date of IMF, Working group analysis
DHCs – NAFTOGAZ SETTLEMENTS (CMUR №20)

Scheme of payments to DHC for heat and gas

- Subsidies assignment
- Application for subsidy
- Non-cash payment (Netting), can be more participants in the chain (CMUR №20)
- Budget for taxes
- Ukrgasvydobuvannya
- Naftogaz for gas
- Oblgaz
- DHC
- Population
- Social Authorities (Minsoc)
- NEURC
- Special Account (Oshadbank)
- Sets distribution shares each month for each DHCs
- “real” cash (CMUR №217)
- for heating
- bill
- subsidy

Source: CMUR №20, 217, the Order of the Minenergy and Minfin 493/688, data of Minregion, Working group analysis
11 BCM OF GAS IS LOST IN HEATING SECTOR

GAS SUPPLY FOR HEATING ~18.6 bln m³

LOSSES IN CENTRAL HEATING SYSTEM ~2.4 bln m³

LOSSES IN BUILDINGS ~9.0 bln m³

EFFICIENTLY USED GAS ~7.2 bln m³

~11.4 bln m³

FAIR PRICING PROVIDES INCENTIVES BUT NOT SOLUTIONS

Source: estimates of the Working Group (estimate of the annual gas consumption is made based on regular temperature in the heating season)
THE COST OF NO ACTION IS TOO HIGH

> 2% GDP
OF EXCESS SPENDING FOR GAS IMPORTS WITH NO ECONOMIC EFFECT

> UAH 30 bln
OF EXCESSIVE BUDGET EXPENDITURES FOR ENERGY SUBSIDIES

> EUR 2 bln
OF TRADE BALANCE OUTFLOW PUTTING PRESSURE ON UAH EXCHANGE RATE AND NBU RESERVES

Source: estimates of the Working Group
CONDISITONS FOR EFFICIENT FUNCTIONING OF EE FUND

TRANSPARENT SUPPLIES (PRODUCTION) + EFFICIENT DEMAND (CONSUMPTION) = EE REFORM SUCCESS

<table>
<thead>
<tr>
<th>Precondition</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Market prices for energy</td>
<td>done</td>
</tr>
<tr>
<td>2 Payments discipline in sector</td>
<td>in process</td>
</tr>
<tr>
<td>3 Establishment of proper legal environment</td>
<td>in process</td>
</tr>
<tr>
<td>4 Strong communication</td>
<td>in process</td>
</tr>
</tbody>
</table>

Source: estimates of the Working Group
DISTRICT HEATING REFORM STRUCTURE

SECTOR REFORM

- Minimization of non-cash settlements (monetization of payments)
- Transition to normal economic relations between the industry participants
- Debt restructuring in the sector
- Improvement of enterprises operational management (planning of heating areas)

REVIEW OF PAYMENTS SYSTEM

- Improvements on financing of budget liabilities to DHC
- Establishment of debt collection tools for DHC (introduction of fines, restriction of heat supply)

FINANCIAL RECOVERY OF INDUSTRY

- Strategy of Sector reform and supporting materials
  (Report, drafts of legal acts, financial model, etc)

REVIEW OF TARIFFS

Review of tariff setting system:
- covering the real operating costs of enterprises
- stimulating investments in asset base modernization

Source: Working group analysis
A large-scale communication campaign is needed. Nowadays about 83% of Ukrainian consider the tariffs to be unfair and non-transparent.

• Law on EE of buildings
• Law on Commercial metering
• Law on HUS
• Law on Energy efficiency
• and ~30 secondary legal acts to be adopted in 2016-2017

The market tariffs for gas and heat will provide EE incentives (since April 2017 based on obligations to the IMF)

80% of buildings shall have heat meters installed till the end of 2016

Contributions of Donors and IFO in the development and implementation of the financial mechanism, institutional capacity and co-financing of projects

Capable institutions for program administration and project development assistance

Sustainable financial mechanism provides affordable projects financing and motivates population to invest in energy efficiency
CONCEPT OF EE FUND

INVESTMENT NEEDS:

>40 bln EUR

HUS SUBSIDIES IS ONE OF THE KEY SOURCES OF PROJECTS FINANCING

State Budget

Donors

Supervisory Board

EE Funds

Commercial banks

Consumers

Projects

Technical Office

Municipality

State Budget

Donors

Supervisory Board

EE Funds

Commercial banks

Consumers

Projects

Technical Office

Municipality

INVESTMENT NEEDS:

>40 bln EUR

HUS SUBSIDIES IS ONE OF THE KEY SOURCES OF PROJECTS FINANCING
POTENTIAL IMPACT OF THE REFORM

- **ANNUAL CAPACITY OF NEW MARKET**: up to 60 UAH bln
- **POTENTIAL REDUCTION IN CONSUMPTION AND GAS IMPORTS**: up to 10 bcm
- **ANNUAL EFFECT ON THE BALANCE OF PAYMENTS**: up to 2,0 EUR bln
- **NEW JOBS**: up to 100 ths
- **POTENTIAL REDUCTION IN ANNUAL SPENDING ON SUBSIDIES**: up to 30 UAH bln
- **OF NEW TAX INCOME**: up to 15 UAH bln

Source: estimates of the Working Group
MISSION AND KEY FEATURES OF THE FUND

Mission of the Fund – improve housing conditions, decrease gas consumption and heating bills of households, thus making important step to Energy Independency of Ukraine

Professional and trusted

Transparent and corruption free

Energy Efficiency Fund

Solid Ukraine-EU-Germany institution

Customer friendly

Fast and modern

Results oriented
THE FUND MODEL CONSISTS OF 4 BLOCKS

1. Governance and financing
   - Multi-Donor Account
   - National Account

2. Execution organizational model
   - Technical office

3. Projects and delivery mechanisms
   - Subsidies non-recipients
   - Subsidies recipients
   - Energy Efficiency projects

4. Subsidies to investment revolving mechanism

EE FUND CREATION – IMPLEMENTATION OF THE ARTICLE 20 OF THE EU DIRECTIVE 2012/27 (LIABILITY OF EU ASSOCIATION AGREEMENT)
Alternatively, IFI is able to transfer financing directly to the bank account.
GOVERNANCE STRUCTURE

Donors

IFI

Strategic Coordination Committee
Alignment of policy and key decisions

Cabinet of Ministers of Ukraine

Ministry of Regional Development (Founder)

State Legal Entity

Management Board (IFI\(^1\), Independent directors, Government)

Executive team (professional managers)

Financial Function

Technical Function

1 IFI – optionally
FUNCTIONS OF THE FUND WILL BE FULFILLED BY THREE BODIES

1 Independent part of technical office

- **Nomination**
  - Search for executives and directors
  - Presentation to Board / stakeholders

- **Salaries/HR**
  - Development of salary plan for executives / board members
  - Presentation to Board / stakeholders

- **Projects approval**
  - Clearance / sign off of financial part of the projects (after T.O)

- **Development of products**
  - Development of financial products
  - Development of implementation mechanisms in collaboration with banks

- **Managing Fund’s cash flow**
  - Managing cash flow
  - Transfers to banks’ project accounts

- **Compliance/Audit**
  - Development of procedures and compliance rules
  - Internal audit

- **Procurement**
  - Certification/Recommendation of construction companies and equipment suppliers
  - Selection of audit companies
  - Negotiations with banks

- **Projects preparation approval**
  - Standard projects preparation
  - Analysis of actual savings Clearance / sign off of the projects
  - Trainings of CCs

- **Procurement**
  - On the spot checks / technical audit management
  - Collaboration with C.Companies
  - Collaboration with DHCs / Municipalities
  - Support to HoAs

- **Communication**
  - Marketing campaign
  - PR campaign
  - Call center
  - Joint marketing activities with construction companies
KEY GOALS AND LIMITATIONS

Key goals

• Sustainable mechanism for reducing energy consumption and households bills
• Visible quick results
• Large scale
• Budget savings
• Creating market for EE measures

Key limitations

• Focus on the residential sector
• Limited financing
• Large group of stakeholders
• Legal limitations
• Still pre-mature level of development of HOA in Ukraine
LEGISLATION ADOPTION PLAN

Decision

1. Approve the concept and action plan for the EE Fund establishment

2. Adopt the Law of Ukraine "On Housing and Utility Services"

3. Adopt the resolution and approve the procedure for monetization (or partial monetization) of utility subsidies

4. Develop the draft of the Law of Ukraine "On the EE Fund" and submit it to the VRU

5. Adopt the Law of Ukraine "On the EE Fund"


7. Establish the new state entity, the "Energy Efficiency Fund"
<table>
<thead>
<tr>
<th>Event</th>
<th>2016</th>
<th>2017</th>
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</thead>
<tbody>
<tr>
<td>Resolution of the CMU on the commitment to establish the Fund</td>
<td>May-Jul</td>
<td>Jan-Mar</td>
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<tr>
<td>Approval by the Government</td>
<td>Aug-Oct</td>
<td></td>
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<tr>
<td>Detalization of operational model of the Fund</td>
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<tr>
<td>Development of the draft Law and draft International Agreement</td>
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<tr>
<td>Approval of the Law by the Parliament</td>
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<tr>
<td>Signature of the International Agreement</td>
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<tr>
<td>Creation of the legal entity</td>
<td></td>
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<tr>
<td>Start of the Fund's operations</td>
<td></td>
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</tr>
</tbody>
</table>

- Resolution of the CMU on the commitment to establish the Fund
- Adoption of the Law of Ukraine on the EE Fund
- Signature of the Int. Agreement
- Law of Ukraine on the State Budget for 2017