

Association of
energy auditors
at communal
sectors

Energy Management System in the City/ Community

www.aea.net.ua



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at communal
sectors

About Association of Energy Auditors at Communal Sectors

The Association of Energy Auditors at Communal Sectors (AEA) – expert union of leaders in energy audit and energy management in Ukraine.

The main task of the AEA is the development of energy audit and energy management markets, energy monitoring, which are elements of the energy management system.

MORE THAN 10 YEARS OF EXPERIENCE:

- > **1000** energy audits of buildings, industrial enterprises, energy supply systems
- > **50** Municipal Energy Efficiency Programs and Sustainable Energy Action Plans
- > **20** Feasibility studies and energy efficiency projects in various sectors
- > **20** trainings on energy audit, energy management, etc.
- > In **15** cities it was implemented an automated energy resources monitoring system

International cooperation

AEA experts are participating in international projects, including:

- «Support of institutional capacity of the Ukrainian cities in development and implementation of sustainable energy development policies» funded by **USAID MERP**
- «Removing Barriers to increase investment in Energy Efficiency in Public Buildings in Ukraine through the ESCO modality in Small and Medium Sized Cities», **UNDP/GEF**



With the participation of AEA experts :

- **Center of Energy Efficiency** was opened in Kyiv.
- In cooperation with international technical assistance projects **manuals, methodological materials, instructions on energy efficiency and energy saving, catalogs of grants and credit programs in the field of energy efficiency** were prepared.
- **Information and Consultative Center for Energy Efficiency**, together with the Association of Ukrainian Cities, was created. AEA experts cooperate with **Bila Tserkva, Ternopil, Irpin, Kremenchug, Kramatorsk, Varash, Pyryatyn, Slavutych, Lutsk** and other cities.
- Drafts **of legal and regulatory documents** approved by various state bodies, including drafts **of subordinate legislation acts on the implementation of mechanisms for energy service contracts in budgetary institutions.**



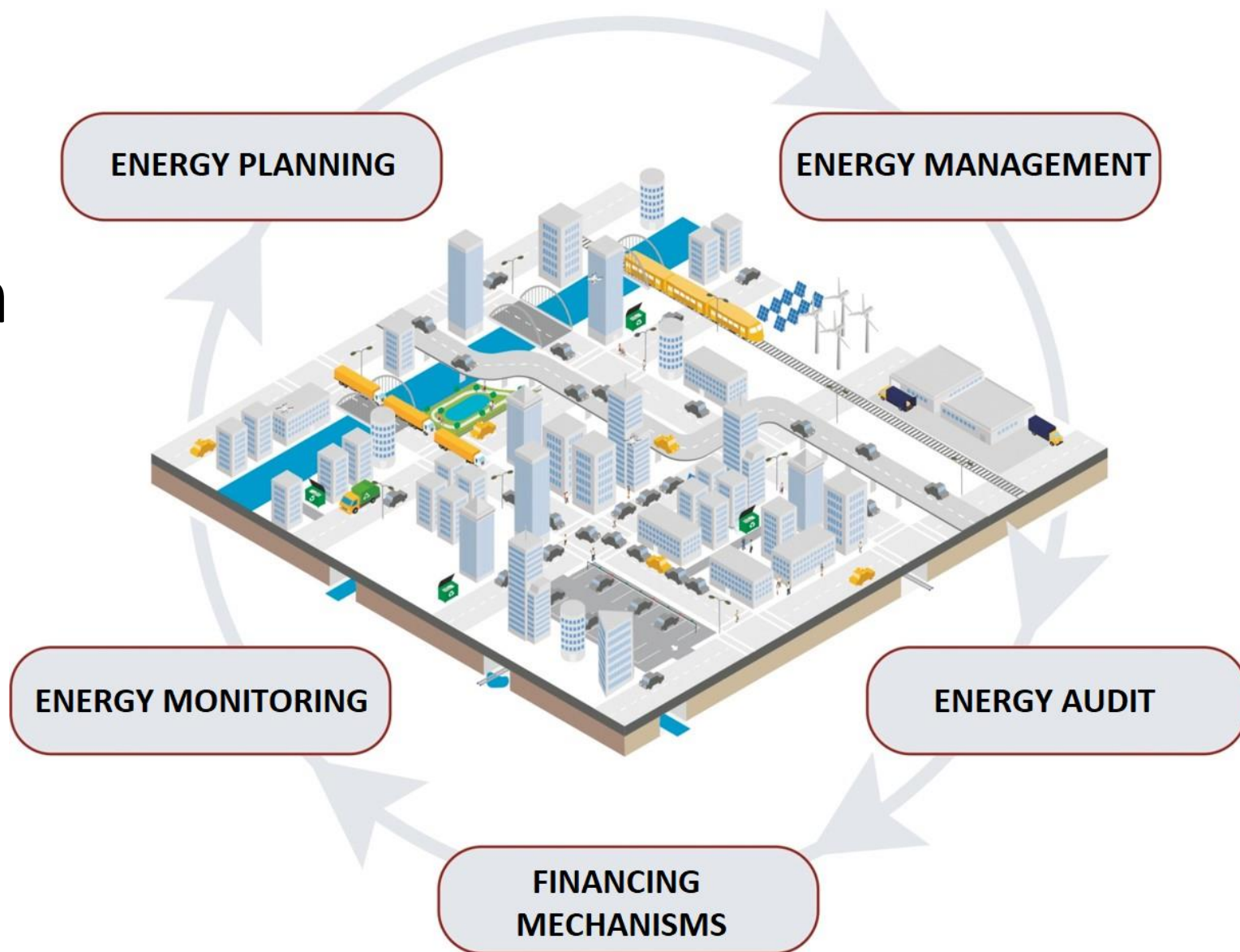
Guideline «Management of Energy in the City / Community»

The Guideline summarizes

- energy audit;
- energy management;
- energy monitoring;
- energy planning;
- funding mechanisms for energy saving measures in communities;
- dozens of document samples and standards for practical use.



A proposal of creation Energy Management System in the City / Community



Energy management system

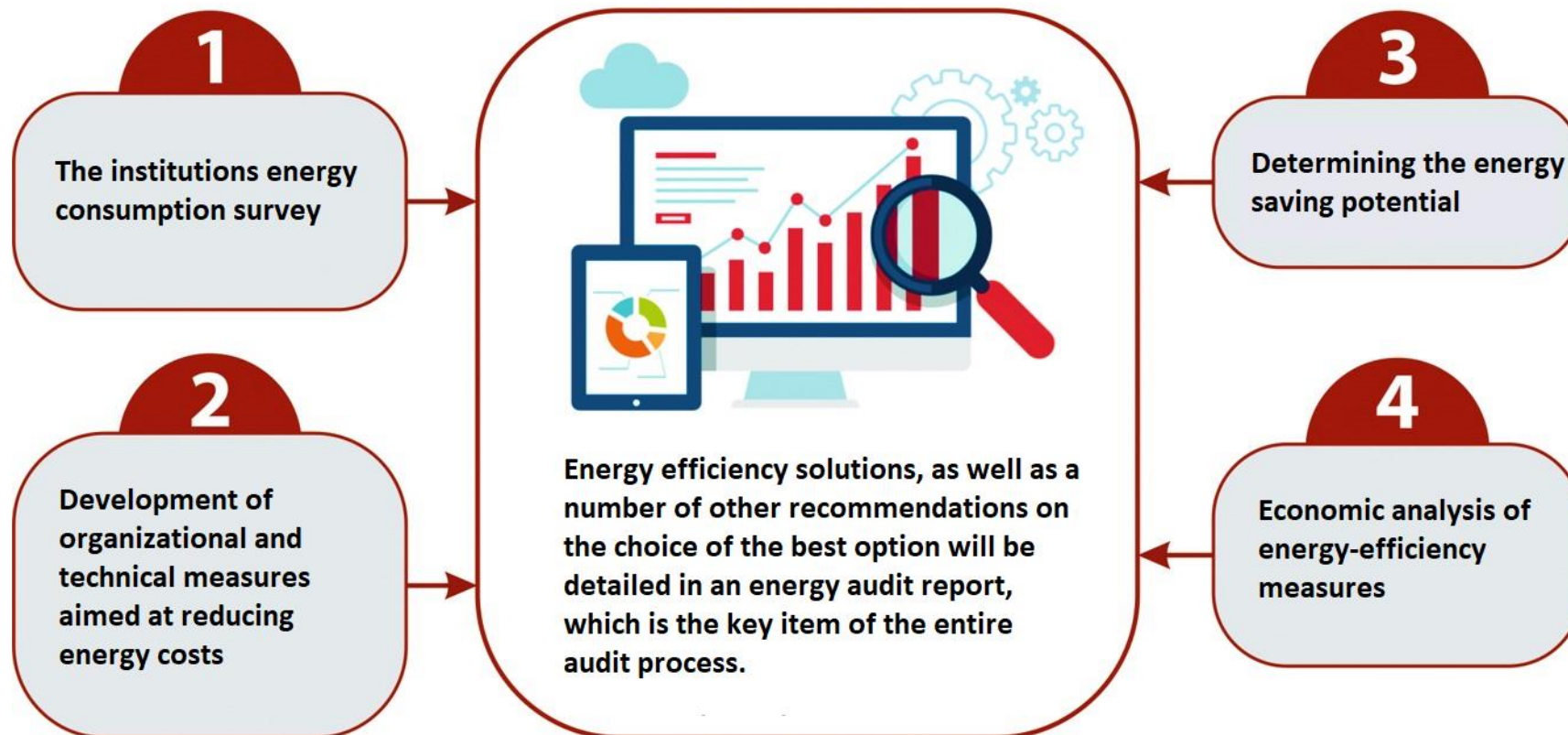
set of interrelated or interacting elements to establish an energy policy and energy objectives, and processes and procedures to achieve those objectives



Energy audit

an inspection, survey and analysis of energy flows, for energy conservation in a building, process or system to reduce the amount of energy input into the system without negatively affecting the output(s)

4 STEPS OF ENERGY AUDIT



Financing mechanisms

State and local budgets:

Energy Efficiency Fund



State Fund for
Regional
Development



“Warm” Loans government
program

Technical Assistance and Grant Financing



USAID
ВІД АМЕРИКАНСЬКОГО НАРОДУ



співпраця з
німеччиною
DEUTSCHE ZUSAMMENARBEIT

giz Deutsche Gesellschaft
für internationale
Zusammenarbeit (GIZ) GmbH



Concessional loans



European Bank
for Reconstruction and Development



Private investments

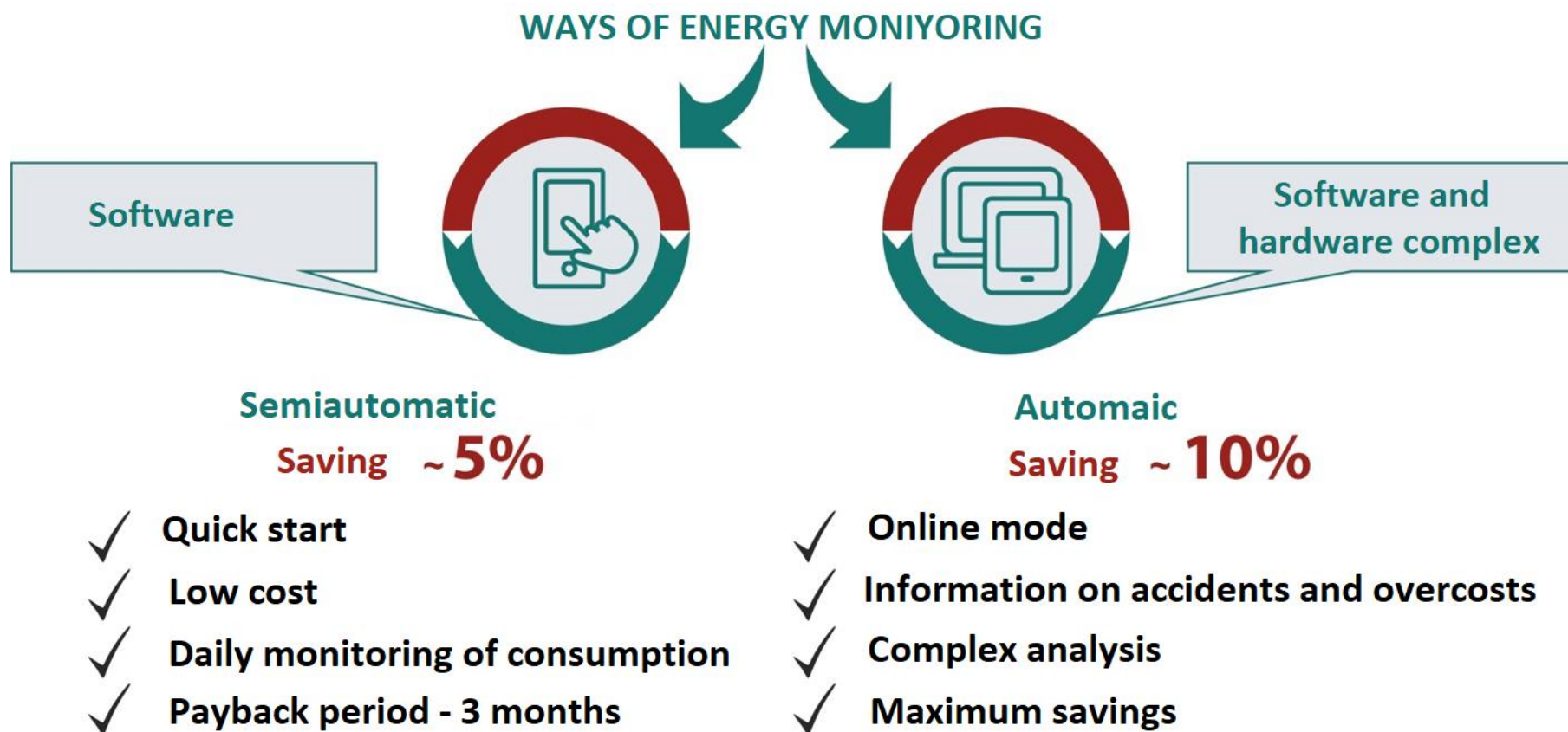


Револьверний
Фонд

Public-private
partnership

Energy monitoring

Monitoring and analysis of the energy data are key tools for implementation energy efficiency strategy in the city / community. This instruments allows to make the right decisions in the field of sustainable energy development based on reliable data



Energy planning

Energy planning documents:

- ✓ City Development Strategy
- ✓ City Master Plan
- ✓ Sustainable Energy and Climate Action Plan (SECAP) – EU
- ✓ Sustainable Economic Development Plan– EU
- ✓ Local programs



-40 %
up to the year 2030

**SUSTAINABLE ENERGY AND
CLIMATE ACTION PLAN**



Mutual integration of the Sustainable Development Goals and Energy Management System in the City / Community

Energy
management

Energy
monitoring

Energy
audit

Energy planning

Financing
mechanisms

Energy datas + CO2

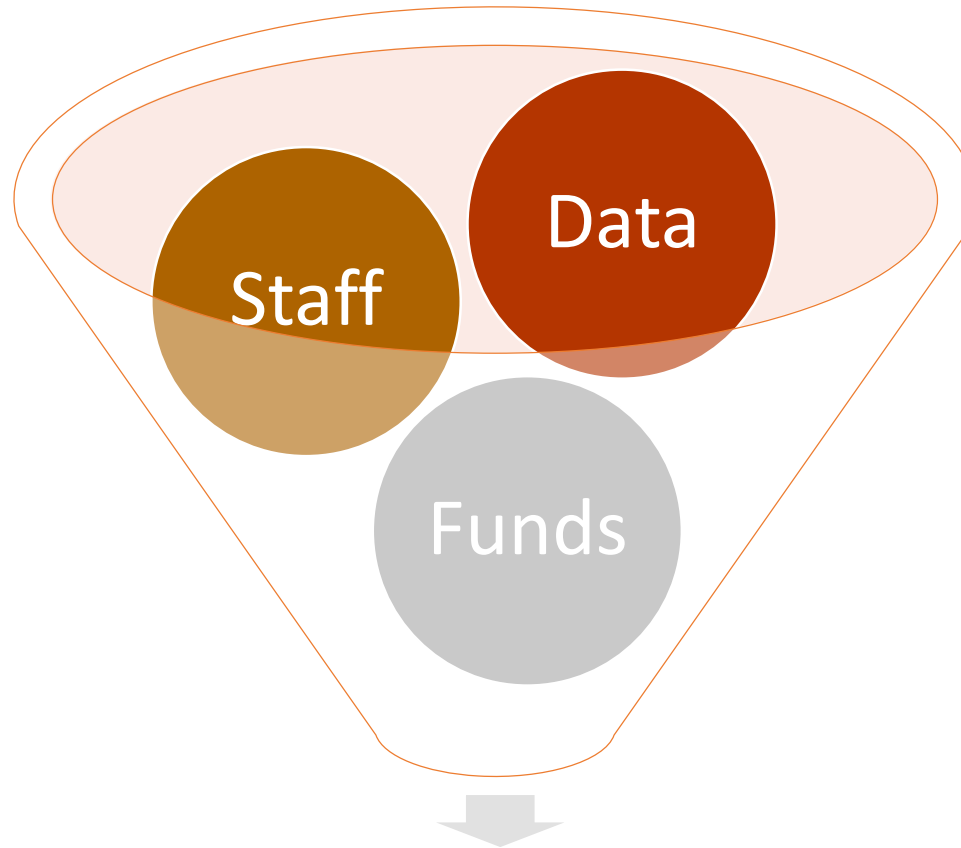
Certification of energy management, taking into account the recommendations of the
standard ISO 50001



Sustainable Development
Goals, in particular:



Important advantages



- Increasing the living standards
- Achievement of maximum benefits at a minimal cost



Why do you need it?



Energy
management

=

Manage funds



Energy
management

=

**Timely, effective
and quality solutions**



Energy
management

=

Membership in EU programs
(eg Covenant of Mayors)

**Access to funding from the Energy Efficiency Fund and international programs.
Your city is one step ahead**

International cooperation: Ukraine's commitment

Creation of integrated energy management system meets:

- ✓ Plan of measures for implementation of energy management systems in budgetary institutions, approved by the Cabinet of Ministers of Ukraine from April 26, 2017.
- ✓ National action plan for renewable energy for the period up to 2020.
- ✓ National Action Plan for Energy Efficiency until 2020.
- ✓ Commitment within the framework of Ukraine's membership in the UN Economic Commission for Europe, Energy Community and in the framework of the accession to the Energy Charter Treaty.
- ✓ Commitment to reduce CO2 emissions in the framework of the Covenant of Mayors. This creates additional opportunities for attracting financial resources



Державний фонд
регіонального
розвитку



ДЕРЖЕНЕРГОЕФЕКТИВНОСТІ
УКРАЇНИ



Modules of Energy Management System

1

- Creation of a target Energy Management Program in your community and its presentation at the session of the respective territorial council

2

- Provision of information materials on topical issues in the field of energy efficiency during the calendar year

3

- Conducting an express audit of the city's energy supply system

4

- Implementation of the energy management system in your community



Modules of Energy Management System

5

- Implementation of the energy management system in your community

6

- Analysis of the City Energy Efficiency Program and expert assistance in updating it to the "Sustainable Energy and Climate Action Plan (SECAP)" standard

7

- Training your community staff on energy audit, energy management, energy monitoring, energy management planning and financial support for projects

8

- Development of 2 investment projects corresponding in accordance to the "Sustainable Energy and Climate Action Plan (SECAP)"



Contact information

NON-GOVERNMENTAL ORGANIZATION “ASSOCIATION OF ENERGY AUDITORS IN THE HOUSING AND COMMUNAL SERVICES SECTOR”

01001, Kyiv, Mala Zhytomyrska st., 16/3, office 4

Tel: +38 (044) 279 59 23; +38 (044) 537 63 30

E-mail: projects@aea.net.ua



Andriy Ginkul

Executive Director
Of Association of Energy Auditors
at Communal Sectors

+380 50 462 46 10

navigator@navigator.net.ua

www.aea.net.ua

