

ENERGY-SAVING CONTRACTS FROM ACCOUNTING PERSPECTIVE

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Today, developed economies of the world are strongly committed to the principals of the sustainable growth and green business implying wide implementation of energy-saving technologies and business models. Ukraine refers to countries most intensively consuming energy resources due to heavy industry and large number of households. Thus, it urgently requires new business models allowing larger involvement of various participants benefiting through them.

However, one of the huge preventions from saving energy through the specific types of business models, companies find lack of accounting standards for correct tax calculations. Unlike countries with highly developed market economies where companies have a great extent of freedom in making their financial reports, Ukraine provides its business with strongly regulated accounting standards where any shifts from them even in the case of no specific regulations are considered financial mistakes against the fiscal system.

The primary objective of new business models for energy saving, which require accounting standards, is to launch a dialogue between energy service companies, public authorities and households to revitalize the market of green energy generation due to the large involvement of households into the energy saving activity; to communicate opportunities of cooperation between households and energy service companies through the improved business models and develop an action plan for driving energy service market on the basis of investment schemes allowing funds to be raised from households.

Development of new business model that enables better monetization of energy savings obtained by households (**crowd-energy-savings**) through the opportunities of being paid dividends for initiative and selling rights for energy savings by means of employing new **financial energy services** in the **energy savings market** also requires new accounting approaches. The model represents **crowd energy performance contracting (CEPC)**. The model will provide a driving incentive for households to save energy through specific energy efficiency projects in the case of establishing clear accounting standards.

The achieved objective can be visualized as a structure of the business model with core agents and other components, established links between them and justified key variables representing the model’s performance. Types of crowd energy performance contracts, as a measure of the achieved objective, are also implied. The model will be mainly approached by system dynamic methodology for assessing a set of scenarios of its performance.

Also, achieved objective can be materialized in specific recommendations for public authorities as regards standards, programmes, regulations and other actions needed to roll-out the model and maintain it in action.

The key outcomes of the offered business model in action can be measured in a number of households involved into the model and having changed their attitude to energy consumption and reservation, additionally obtained energy savings / generated renewable energy, investment amount into energy service sector, improvements in energy-efficiency policies and specific skills gained by people contributing to the energy service sector.

Establishment of the market mechanism accompanied by government interventions for freeing the trade of the energy savings rights, which is expected to stimulate energy saving activity and changes in consumers' behavior due to profits made through the new sector of financial energy services. Determination of specific conditions for participants of the new energy savings market so that a trade off in their interests can be achieved.

The objective will result in the presented market environment nesting the developed business model – namely, description of specific features inherent to energy savings and their ownership rights as two interconnected market products, their demand and supply curves influenced by factors, a set of instruments and their impacts for the government to intervene in the newly created market of energy savings rights (taxes and penalties, subsidies, price ceiling and floor, specific restrictions and limits and etc.), current regulations for inciting energy savings in European countries with outlined ways of improvement and core participants' interests in the new marketplace.

The result of the performing market mechanism can be measured in a number of potentially involved participants, new regulatory instruments and the volume of market created for the rights of energy savings ownership.

Establishment of the sub model (being a part of the primary business model of crowd energy performance contracting) enabling existing energy service companies to be invested on the basis of monetized energy savings obtained by households (**crowd-energy-savings investments**) that, in turn, are paid specific dividends for initiative. Development of specific regulations for energy savings securitization regarded as issuing the securities and tradable certificates backed by energy savings rights. This can be a driver of energy savings obtained by households and a means for their better monetization. **Energy savings securities / certificates** can become specific financial instruments in the financial market.

The objective is focused on the financial elements of the primary business models and will be represented by a financial scheme of relationships between key participants involved in the crowd energy performance contracts encompassing indicators (variables) for cost-profit analysis of the energy efficiency investments over different time horizons and under different conditions of currently functioning capital market. The scheme will be valuable to all agents of energy savings market in their taking decision of investing energy efficiency projects through specific contracts.

The final result can be measured in the investment amount that can be flowed into the energy efficiency sector, a number of types of securities / certificates appropriate for energy savings rights and a range of determinants ensuring the investment circle related to the energy efficiency performance to be closed.

Literature:

1. Energy Strategy of Ukraine for the period until 2030. Developer – Cabinet of Ministers of Ukraine.
2. “Smart Energy Consumption for Wellbeing of L’viv Region Communities”. Initiators –Swedish International Development Cooperation Agency (SIDA).

THE NEED OF NEW ACCOUNTING APPROACH FOR ASSETS OWNED BY MULTI-STRUCTURED MINING CLUSTERS

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Ukrainian economy heavily relies on mining industry that provides internal energy consumption and export amount. However, Ukrainian mines are mostly coming to the end of their life cycle and, thus, evoking the challenge of post mining recovery. There are different approaches to the post mining recovery, beginning from abandoning coal mines and finishing with their revitalizing. We are committed to the last approach acceptable due to the innovations allowing the use of natural resources available through the mine facilities. This is approach is called multi-structured cluster organized on the basis of the mine having stopped to extract mineral resources but still providing water, underground gas, cavities, wind and solar energy and etc.

However, multi-structured mining cluster is a business model involving many participants which act under various regulatory frameworks. Therefore, the project of establishing multi-structured clusters on mines’ basis requires reviewing and making accounting standards used by each participant consistent with each other.

Effective growth and development of a mine is a complex process that leads to solving the problems of the population at the regional level, improvement in the living conditions of the inhabitants of the region by balancing social, economic and environmental development that is based on the rational use of all resource potential of the region, including geographical features of the region, and also features of the economy, infrastructure and industry of small cities belonging to the region.

We must emphasize that conditions are changing, and problems of how to create conditions for effective development of mines, enhance innovations, improve the structure of the regional economy and improve competitiveness of products and services are becoming increasingly important.

Modern society shows that the integration of the Ukrainian economy into the global economic system is not possible while ignoring the trend towards consolidation resulting in the appearance of cluster associations.