



## PROBLEMS OF MACROECONOMICS AND SOCIO-ECONOMIC DEVELOPMENT

### INVESTIGATION OF ECONOMIC NATURE AND ACCOUNTING OF MANUFACTURING DEFECTS ON THE EXAMPLE OF FOREST ENTERPRISES

page 4–8

Market infrastructure formation of national economy requires a change in production orientation and sales channels, in particular, to ensure its quality and safety. Under the conditions of a saturated market and increased competition to improve the quality of products and reduce manufacturing defects should be one of the main tasks of the enterprise management system.

Research of specifics of the forest enterprises allowed to specify the technological aspects of internal accounting organization and develop a standard form of the manufacturing defect act, which makes it possible to identify the perpetrators of poorly manufactured products in various stages of production and transportation of products. Reduction of manufacturing defects causes an increase in the proportion of usable finished products, contributes to an increase in profit, gross income and profitability.

The article also provides recommendations for development of the scale, which summarizes the technological features of the timber processing and reflects wage, depending on the cause of manufacturing defect that isn't a fault of the employee.

**Keywords:** manufacturing defect, labor costs, manufacturing defect losses, manufacturing defect records, operational control, manufacturing process, wage.

#### References

1. Bilova, N., Yanovska, N. (2012). Oblikovuiemo brak u vyrobnytvstvi. *Podatky ta bukhholderskyi oblik*, 99, 28–39.
2. Dobryanska, M. V. (2012). Analiz zapasiv vyrobnychkykh pidpryemstv i vyroblennia propozyitsii shchodo yikh efektyvnoho vykorystannia u rynkovykh umovakh. *Naukovyi visnyk NLTU Ukrainy*, 22.07, 175–180.
3. Yermolenko, H. S., Shumliaiiev, B. O. (2012). Orhanizatsiia obliku vyrobnychkykh zapasiv, nedoliky obliku ta shliakhy yoho udoskonalennia. *Sbornik nauchnykh trudov Dnepropetrovskogo natsional'nogo uniwersyteta zheleznodorozhnogo transporta imeni akademika V. Lazariiana «Problemy ekonomiki transporta»*, 3, 29–33.
4. Instruksiiia shchodo zastosuvannia Planu rakhunkiv bukhholderskoho obliku aktyviv, kapitalu, zoboviazan i hospodarskykh operatsii pidpryemstv i orhanizatsii. *Order of the Ministry of Finance of Ukraine from 30.11.1999 № 291*. Available: <http://zakon4.rada.gov.ua/laws/show/z0893-99>
5. *Labor Code of Ukraine. Version from 05.10.2016*. Available: <http://zakon4.rada.gov.ua/laws/show/322-08>
6. *Letter of the Ministry of Labour and Social Policy of Ukraine from 15.05.2002 № 06/2-4/132*. Available: [http://search.ligazakon.ua/l\\_doc2.nsf/link1/FIN4269.html](http://search.ligazakon.ua/l_doc2.nsf/link1/FIN4269.html)
7. Oliinyk, T. O., Reznichenko, N. V. (2011). Problemy orhanizatsii obliku vyrobnychkykh zapasiv na skladakh pidpryemstva. *Stalyi rozvytok ekonomiky*, 3, 204–207.
8. Pro zatverdzhennia Polozhennia (standartu) bukhholderskoho obliku. *Order of the Ministry of Finance of Ukraine from 31.12.1999 № 318*. Available: <http://zakon4.rada.gov.ua/laws/show/z0027-00>
9. Stetsyuk, N. Y. (2014). Ways of development accounting and control productive resources use on forestry enterprises. *Zeszyty Naukowe Uniwersytetu Przyrodnicz – Humanistycznego w Siedlcach*, 100, 142–151.
10. Wang, G. (1994). *Treading Different Pathes. Informatization in Asian Nations*. Norwood, NJ.: Albex, 268.

### INNOVATIVE AND LOGISTICS DEVELOPMENT BUSINESS MODEL ELABORATION OF THE ECONOMY OF UKRAINE

page 9–14

The problematic position of export operations of the enterprises on foreign trade format are analyzed in the article. The variant of implementation of innovative and logistics elements in the enterprise management system is considered in order to increase the export potential of the enterprise. It is shown that combination of the in-

novative direction with the logistics is possible using enterprise management paradigm. Such approach would increase the competitiveness of the offered products on the international market. The conceptual model of innovative and investment development of the export potential of enterprises is proposed to determine the potential of the company to produce and promote competitive products on the external market and provide competitive services in the required quantity, the right quality in a timely manner with minimal costs.

**Keywords:** export potential, logistics management, innovative and logistics development, logistics management paradigm.

#### References

1. Halchynskyi, A. S., Heiets, V. M. et al. (2004). *Stratehiia ekonomichnoho i sotsialnoho rozvytku Ukrainy (2004-2015 roky) «Shliakhom Yevropejskoi intehtratsii»*. Kyiv: YuTs Derzhkomstatu Ukrainy, 416.
2. Sidenko, V. R. (1998). *Vneshneekonomicheskaia deiatel'nost': problemy sistemnoi transformatsii pri perehode k rynku*. Kyiv: IMEMO, 305.
3. Drozdova, H. M. (2002). *Menedzhment zovnishnoekonomichnoi diialnosti pidpryemstva*. Kyiv: TsUL, 171.
4. In: Kredisov, A. I. (1998). *Upravlinnia zovnishnoekonomichnoiu diialnistiu*. Kyiv: VIRA-R, 448.
5. Borisova, L. P. (2012). Pozitsionirovanie Ukrainy na rynku tovarov i uslug v vostochnom partnerstve. *Biznes-inform*, 3, 78–82.
6. *Vytiahy z: Kerivnytstvo Oslo: Rekomendatsii zi zboru ta analizu danykh stosovo innovatsii*. (2009). Kyiv: UKRINTEI, 163.
7. Kyrchenko, O. A. (2002). *Menedzhment zovnishnoekonomichnoi diialnosti*. Ed. 3. Kyiv: Znannia-Pres, 384.
8. Matalka, S. M. (2011). *Upravlinnia efektyvnistiu zovnishnoekonomichnoi diialnosti pidpryemstv*. Luhansk: Noulidzh, 210.
9. Bartashevska, Yu. M. (2010). Rozvytok mashynobuduvannia Ukrainy: stan, problemy, perspektyvy. *Yevropejskyi vektor ekonomichnoho rozvytku*, 1 (8), 19–25.
10. Folomiev, A. M., Geiger, Ye. A. (1997). *Menedzhment innovatsii. Teoriia i praktika*. Moscow: RAHS, 227.
11. In: Heiets, V. M., Mazaraki, A. A. (2008). *Priorytety natsionalnoho ekonomichnoho rozvytku v konteksti hlobalizatsii nykh vyklykiv*. Kyiv: Kyiv National University of Trade and Economics, 273.
12. Mazaraki, A. A., Yukhymenko, V. V., Hrebelynyk, O. P., Melnyk, T. M. et al.; In: Mazaraki, A. A. (2008). *Zovnishnotorhovelni aspekty konkurentnoi polityky Ukrainy v umovakh SOT*. Kyiv: Kyiv National University of Trade and Economics, 309.
13. Pro zovnishnoekonomichnu diialnist. *Law of Ukraine from 16.04.1991 № 959-XII*. Available: <http://zakon3.rada.gov.ua/laws/show/959-12>
14. *State Statistics Service of Ukraine*. Available: <http://www.ukrstat.gov.ua/>
15. *Statystychna informatsiia. State Statistics Service of Ukraine*. Available: [http://www.ukrstat.gov.ua/operativ/oper\\_new.html](http://www.ukrstat.gov.ua/operativ/oper_new.html)
16. Vlasiuk, T. O. (2015). Stan i tendentsii zovnishnotorhovelnoi diialnosti Ukrainy: vyklyky dlia ekonomichnoi bezpekky ta sposoby yikh podolannia. *Stratehichni priorytety*, 4 (37), 48–58.
17. Kucheruk, H. Yu. (2012). Innovative logistic paradigm of quality management of transport services. *Efektynna ekonomika*, 6. Available: <http://www.economy.nayka.com.ua/?op=1&z=1193>

### ACTIVATION EFFECTIVENESS EVALUATION OF INNOVATION ACTIVITY PROCESSES OF THE ENTERPRISES

page 15–21

Despite the national importance of innovative activity development in Ukraine, clear relationship to the innovative process has not yet formed. There are a number of outstanding issues concerning the methods for activation effectiveness evaluation of innovative activity of the enterprises, identifying priority allocation of financial resources in the course of innovation.

The ways of improving analytical methods for activity effectiveness evaluation of innovative activity of the enterprises in different sectors of the national economy are discussed in the article. They are based on the performances of their economic, social and technological development. The practical aspects of implementation of the methodology for effectiveness evaluation of innovative activity are

developed. They can be used as the basis for approaches to the formation and evaluation of the implementation of the state industrial policy of Ukraine.

It is proved that economy modernization, based on the formation of high-tech resources in the real economy, and effective participation of innovative activities in economic circulation allows economic growth in the conditions of new economy.

Technology can effectively develop only under appropriate forms and methods of institutionalization and socialization.

The complex nature of the processes of innovative development of domestic enterprises has predetermined the need for effective implementation of innovation level measurement system based on the definition of the integral performance index of their implementation and related sub-indices in its structure, based on a four-level hierarchical model. Integral performance indicator is a vector with the components of the sub-indices by kinds of influence factors.

The proposed approach to the analysis of the activation effectiveness of innovative activity of the enterprises can be the basis for approaches to the development and evaluation of the implementation of the state industrial policy of Ukraine, the agrarian policy of Ukraine and social security policy in the system of the national economy, which should ensure the implementation of an innovative model of development.

**Keywords:** innovative activity, technologies, technical and technological innovations, innovative programs, investment, profitability.

#### References

- Adamenko, O. A. (2010). Kontseptualni zasady innovatsiinoho rozvytku pidpriemstv. *Naukovi pratsi Natsionalnoho universytetu kharchovykh tekhnologii*, 35, 5–10.
- Amosha, O. I., Antoniuk, V. P., Zemliankin, A. I. et al. (2007). *Aktivizatsiia innovatsiinoi diialnosti: orhanizatsiino-pravove ta sotsialno-ekonomichne zabezpechennia*. Donetsk, 326.
- Mensh, G. (2001). *Tehnologicheskii pat: innovatsii preodolevaiut depressiiu*. Moscow, 35.
- Shumpeter, I. (1992). *Teoriia ekonomicheskogo rozvitiia*. Moscow: Progress, 231.
- Iliashenko, S. M., Bilovodska, O. A. (2010). *Upravlinnia innovatsiinykh rozvytkom*. Sumy: Universytetska knyha, 281.
- Heiets, V. M., Semynozhenko, V. P. (2006). *Innovatsiini perspektyvy Ukrainy*. Kharkiv: Konstanta, 272.
- In: Heiets, V. M. et al. (2015). *Innovatsiina Ukraina 2020*. Kyiv, 336.
- In: Pererva, P. H., Mekhovych, S. A., Pohorielov, M. I. (2008). *Orhanizatsiia ta upravlinnia innovatsiinoiu diialnistiu*. Kharkiv: NTU «KhPI», 1025.
- Fedulova, L. I. (2014). Upravlinnia innovatsiinykh rozvytkom pidpriemstva. *Marketynh i menedzhment innovatsii*, 2, 122–135.
- Naukova ta innovatsiina diialnist v Ukraini*. (2015). Kyiv: DP «Informatsiino-vydavnychiy tsentr Derzhstatu Ukrainy», 163.
- This makes it possible to diversify the range of additional services, which may vary depending on:
  - Geographic location (border zone, resort zone).
  - Tourist orientation.
  - Production area.
  - International orientation.
- Use of advantages, taking into account these features, can significantly extend the range of additional services that eventually able to increase the profitability of railroad stations.

**Keywords:** railroad station, railroad station complex, efficient management, range of additional services, profitability.

#### References

- State Statistics Service of Ukraine*. Available: <http://www.ukrstat.gov.ua/>
- Pro zatverdzhennia Derzhavnoi tsilovoi prohramy reformuvannia zaliznychnoho transportu na 2010-2019 roky. *Decree of the Cabinet of Ministers of Ukraine from 16.12.2009 № 1390*. Available: <http://zakon1.rada.gov.ua/laws/show/1390-2009-п>
- Domanskii, V., Belabudtinova, E. (2008). Mezhdunarodnyi opyt reformirovaniia zheleznykh dorog na puti ih privatizatsii i razvitiia rynochnykh otnoshenii. *Zaliznychnyi transport Ukrainy*, 5, 14–18.
- Zaitseva, I. Yu. (2012). Stratehiia rozvytku zaliznychnoho transportu Ukrainy. *Visnyk ekonomiky transportu i promyslovosti*, 38, 302–304.
- Deineka, O. H., Bozhok, A. R. (2010). Reformuvannia zaliznychnoho transportu Ukrainy v konteksti svitovoho dosvidu. *Visnyk ekonomiky transportu i promyslovosti*, 29, 213–216.
- Kyzym, O. V., Kibkalo, O. V. (2011). Analiz suchasnykh svitovykh tendentsii rozvytku zaliznychnykh vokzalnykh kompleksiv. *Zbirnyk naukovykh prats Donetskyi instytut zaliznychnoho transportu Ukrainskoi derzhavnoi akademii zaliznychnoho transportu*, 25, 27–32.
- Guo, Y. C., Wan, L., Wei, Y. Y. (2014). Commercial Form Analysis and Strategy Optimization of Train Station Based on Urban Development. *Applied Mechanics and Materials*, 584-586, 425–428. doi:10.4028/www.scientific.net/amm.584-586.425
- Li, J. P. (2000). Train station passenger flow study. *2000 Winter Simulation Conference Proceedings (Cat. No.00CH37465)*, 2, 1173–1176. doi:10.1109/wsc.2000.899082
- Ozer, B., Wolf, M. (2014). A Train Station Surveillance System: Challenges and Solutions. *2014 IEEE Conference on Computer Vision and Pattern Recognition Workshops*. Ohio, 652–657. doi:10.1109/cvprw.2014.99
- Chakour, V., Eluru, N. (2013). Analyzing commuter train user behavior: a decision framework for access mode and station choice. *Transportation*, 41 (1), 211–228. doi:10.1007/s11116-013-9509-y
- Aksenov, I. M. (2005). Povyshenie effektivnosti passazhirskih perevozok s uchetoм zarubezhnogo opyta. *Zaliznychnyi transport Ukrainy*, 2, 82–86.
- Sherepa, K. M. (2010). Ekonomichna otsinka efektyvnosti roboty y rozvytku pasazhyrskoho transportnogo kompleksu. *Visnyk Natsionalnoho Aviatstsiiho Universytetu*, 26, 134–139.
- Brovko, Yu. K. (2013). Vokzal kak perspektivnyi ob'ekt dlia investitsii. *Vagonnyi park*, 9 (78), 44–49.
- Diversifikatsiia na zheleznykh dorogah Yaponii. (2015). *Zheleznye dorogi mira*, 10, 41–44.
- Brovko, Yu. K. (2013). Vokzal kak iskusstvo vo vseh ego proiavlennii: instalatsii na vokzalah. *Vagonnyi park*, 8 (77), 48–53.
- Mulenko, O. V. (2014). Razrabotka marketingovykh meropriatii dlia povysheniia urovnia servisnoho obsluzhivaniia passazhirrov na vokzalah. *Vagonnyi park*, 12 (93), 57–59.
- Salashchenko, O. E. (2012). Reforma «Umnyi vokzal»: sovremennyi vokzal – tochka sotsial'no-ekonomicheskogo razvitiia. *Vagonnyi park*, 8 (65), 54–58.
- Azarenkova, Z. V. (2000). Vokzal dlia goroda. *Promyshlennoe i grazhdanskoe stroitel'stvo*, 10, 13–14.
- In: Kirichenko, E. I. (2003). *Russkoe gradostroitel'noe iskusstvo. Gradostroitel'stvo Rossii serediny XIX – nachala XX veka. Book 2*. Moscow: Progress-Traditsiia, 560.
- Gutnov, A. E. (1984). *Evolutsiia gradostroitel'stva*. Moscow: Stroizdat, 256.
- Rusanova, I. V., Skliarova, I. V. (2011). Transportno-peresadochni vuzly u planuvanii strukturi naibilshoho mista. *Dosvid ta perspektyvy rozvytku mist Ukrainy. Problemy rozvytku naikrupnishykh mist Ukrainy*, 20, 259–268.
- Choban, O. Ya. (2013). Pryntsypy modernizatsii ta rekonstruktsii zaliznychnykh vokzalnykh kompleksiv istorychnykh mist. *Visnyk Natsionalnoho universytetu «Lvivska politekhnika». Seriya: Arkhitektura*, 757, 321–324. Available: [http://nbuv.gov.ua/UJRN/VNUL-PARX\\_2013\\_757\\_51](http://nbuv.gov.ua/UJRN/VNUL-PARX_2013_757_51)

## RESEARCH OF RAILROAD STATIONS IN TERMS OF THE EFFICIENT DELIVERY OF ADDITIONAL SERVICES TO INCREASE PROFITABILITY

page 21–27

The study of modern railroad stations and railroad station complexes in the world in terms of their capacity for more effective delivery of additional services to local railroad station complexes with the aim to improve their profitability.

The research allowed to generalize organization principles of railroad stations, to identify global trends in the development of effective railroad station management, as an environment to delivery of additional services, to explore the significance and role of railroad stations as in the passenger sector of railway transportation and in society.

Firstly, the railroad station is the object of railway infrastructure, which is concentrated and accumulated considerable passenger traffic.

Secondly, the railroad station is the object of municipal infrastructure. It gives the possibility of co-operation in the commercial activities of individual business entities, the interests of sectors of the economy, the social interests of the population.

Thirdly, international experience confirms that the railroad station may be an element of contemporary art.

## DEVELOPMENT OF STANDARDIZED SOCIAL REPORTING FORMATION METHOD FOR PJSC «UKRAINIAN RAILWAY»

page 27–35

Phased method of forming a standardized social reporting, considered its components, principles and standards that it should conform was developed in this article. The ten basic steps were developed for preparation of the social reporting of PJSC «Ukrainian Railway» that are divided into three cycles and have all-covering function of the preparation of the first social report to its not only preparation, but also the spread and expansion of boundaries and stakeholder groups that will ultimately get the trust clients and investors. A sample of primary structure with the components (content), which should be included in the social report of PJSC «Ukrainian Railway», is made based on the developed main stages of forming a social accountability for the PJSC «Ukrainian Railway». All data have to analyze not only the accounting figures, but also the financial, operational, statistical. The study of existing social reporting in the railway industry in other countries, as well as in the companies of other activities, their audit conclusions, have been allowed us to find and analyze the main disadvantages of this type of reporting. Also it have been allowed to define international standards of social responsibility that are suited to the industry, as well as consider all this while implementing standardized social reporting of PJSC «Ukrainian Railway». As a result, this article are shown the advantages and disadvantages of socially responsible actions of other international companies that allow to learn from and to avoid the negative factors in the implementation process into practical activity of PJSC «Ukrainian Railway».

**Keywords:** financial reporting, social reporting, corporate social responsibility, non-financial reporting, Ukrainian Railway, joint stock company.

### References

- Vorobei, V. (2009). Sotsialna zvitnist: stan ta perspektyvy. *Materialy Zboriv merezhi Hlobalnogo Dohovoru OON*. Kyiv, 11.
- Proekt Ekspertnoi rady Forumu sotsialno vidpovidalnoho biznesu Ukrainy «Sotsialna vidpovidalnist: pryntsyipy ta rekomendatsii shchodo zvitnosti» (4 lyppnia 2006 r.). Available: <http://www.auc.org.ua/files/f1152089376.doc>. Last accessed: 11.10.2012.
- Vorona, O. V. (2010). Sotsialna vidpovidalnist yak suchasna kontseptsiia biznesu. *Visnyk ekonomiky transportu i promyslovosti*, 29, 410–417.
- Shevchuk, V. O. *Teoretyko-metodolohichni aspekty analizu protsesiv staloho rozvytku*. Available: [http://www.nam.kiev.ua/ape/n\\_01\\_5-6/Shevchuk.htm](http://www.nam.kiev.ua/ape/n_01_5-6/Shevchuk.htm)
- Pro aktsionerni tovarystva. *Law of Ukraine from 17.09.2008 № 514-VI. Article 52, Part. 2. Paragraph 17*. Available: <http://zakon2.rada.gov.ua/laws/show/514-17/page4>
- Journal of Ukrainian League of Industrialists and Entrepreneurs*, 36. (2013). Available: <http://uspp.ua/newwisnuk/uspp-36-gruden-2013.pdf>
- In: Butyntsia, F. F. (2007). *Alfa i omeha bukhhalterskoho obliku abo moia bolisna ne spovid*. Zhytomyr: PP «RUTA», 328.
- Holovnyi analitychnyi media-portal pro korporatyvnu sotsialnu vidpovidalnist*. Available: <http://www.csr-review.net/>. Last accessed: 01.02.2013.
- Shkulipa, L. V. (2014). *Bukhhalterskyi oblik ta analiz operatsii z sotsialnoho zakhystu pratsivnykiv pidpriemstva: teoriia i metodyka*. Kyiv: NASOA, 240.
- In: Schuller, A., Kruesseibeig, H.-G. (2006). *Analiz ekonomicheskikh sistem: osnovnye poniattia teorii hoziaistvennogo poriadka i politicheskoi ekonomiki*. Translated from German. Moscow: Ekonomika, 338.
- Globalnyi dogovor OON: kandidaty na ochislenie*. Available: <http://www.csr-review.net/politika-okazyvaet-bolshoe-vliyanie-na-nefinansovuyu-otchetnost-statistika-globalnoy-initsiatyvy-po-otchetnosti>. Last accessed: 01.02.2013.
- Pyvovarskyi, A. (04.09.2015). Perevahy korporatyzatsii Ukrzaliznytsi vidchuiut i pratsivnyky, i kliienty. *Ukrainska zaliznytsia*. Available: [http://www.uz.gov.ua/press\\_center/up\\_to\\_date\\_topic/408458/](http://www.uz.gov.ua/press_center/up_to_date_topic/408458/)
- Vyznachenno naiprozorishi kompanii v Ukraini. *Rozvytok korporatyvnoi sotsialnoi vidpovidalnosti (KSV)*. Available: <http://csr-ukraine.org>
- Orlov, D. (2010). RJD v troike luchshih kompanii. *Trud*, 67. Available: [http://www.trud.ru/article/18-04-2010/240375\\_rzhd\\_v\\_trojke\\_luchshix\\_kompanij.html](http://www.trud.ru/article/18-04-2010/240375_rzhd_v_trojke_luchshix_kompanij.html)
- Sotsialnaia otvetstvennost. *OAO «RJD»*. Available: [http://rzd.ru/static/public/rzd?STRUCTURE\\_ID=5085](http://rzd.ru/static/public/rzd?STRUCTURE_ID=5085)
- Nefinansova zvitnist: instrument sotsialno vidpovidalnoho biznesu. Initsiatyva Hlobalnogo dohovoru v Ukraini*. (2010). Kyiv: Predstavnytstvo OON v Ukraini, 84.
- In: Monden, Ya. et al. (1989). *Kak rabotaiut iaponskie predpriiatiia*. Translated from English. Moscow: Ekonomika, 262.
- Rukovodstvo po otchetnosti v oblasti ustoiichivogo razvitiia i Otrasevooe prilozhenie dlia sektora finansovykh uslug. Version 3. RG & FSSS*. (2000-2008). GRI. Available: <https://www.globalreporting.org/resource/library/G3-Russian-Financial-Services-Sector-Supplement.pdf>
- Fedoseev, V. I., Kretov, S. P., Shibaeva, S. S.; In: Grishchenko, V. A. (2001). *Upravlenie otvetstvennostiu*. Novosibirsk: SGU-PSa (NIIZhTa), 114.
- Barash, Yu. S., Korzhenevych, I. P. (2008). Rol zaliznychnoho transportu Ukrainy v zabezpechenni staloho rozvytku suspilstva. *DIIT*, 24, 201–206.
- Zinchenko, A. H., Saprykina, M. A. (2008). *Sotsialna vidpovidalnist v Ukraini: Pohliady riznykh steikholderiv. Rehionalnyi aspekt*. Kyiv, 60.

## OVERALL ASSESSMENT OF THE ENERGY EFFICIENCY IN UKRAINE

page 36–41

The article is devoted to investigation of the energy efficiency in Ukraine. The author aims to establish the current state of Ukraine energy efficiency and identify the potential of energy efficiency development. The object of research are following areas of energy efficiency in Ukraine: energy efficiency of the regions (including analysis of energy efficiency of the fields of activity, which is within the territorial units, namely agriculture, industry, services, housing sector and determine the total rate of energy efficiency in the region); energy efficiency of GDP of Ukraine compared to the same period of other countries; energy efficiency of building fund of Ukraine and energy efficiency of industries. We have found a significant nonconformance at all analyzed levels of energy efficiency to European and world levels in the presence of significant energy efficiency potential. The main barriers (which are both reserves) of energy efficiency in Ukraine are identified: imperfect legal framework, lack of sufficient incentive system for energy efficiency measures, obsolete equipment used in industry, physical aging of housing stock, dependence on exported energy resources, low awareness of population, lack of sufficient training in energy efficiency, lack of a unified database of energy use. Energy efficient development of Ukraine will be provided by eliminating these barriers.

**Keywords:** energy efficient development, energy resources, energy independence, energy efficiency, potential, consumption.

### References

- State Agency on Energy and Energy Saving of Ukraine*. Available: <http://sae.gov.ua/>
- Association for Energy Efficiency and Energy Saving*. Available: <http://energy-efficiency.in.ua/>
- Bioenergy Association of Ukraine*. Available: <http://uabio.org/>
- Institute for Renewable Energy at NAS of Ukraine*. Available: <http://www.ive.org.ua/>
- International Energy Agency*. Available: <https://www.iea.org/>
- Global Energy Statistical Yearbook 2016. Enerdata*. Available: <https://yearbook.enerdata.net/>
- Mills, L., McCrone, A. (2015). Clean Energy Investment By the Numbers – End of Year 2015. *Bloomberg New Energy Finance*. Available: <https://www.bnef.com/dataview/clean-energy-investment/index.html>
- Statistical Review of World Energy. BP*. Available: <http://www.bp.com/en/global/corporate/energy-economics/statistical-review-of-world-energy.html>
- Renewable Energy Policy Network for the 21st Century*. Available: <http://www.ren21.net>
- Kallakuri, Ch., Vaidyanathan, Sh., Kelly, M., Cluett, R. (2016). *The 2016 International Energy Efficiency Scorecard*. Washington: American Council for an Energy-Efficient Economy, 117. Available: <http://enertic.org/imgfiles/enerTIC/2016/Contenidos/20160-aceee-2016-international-energy-efficiency-scorecard.pdf>
- Sukhodolia, O. M. (2006). *Enerhoefektyvnist ekonomiky u konteksti natsionalnoi bezpeky: metodolohiia doslidzhennia ta mekhanizmy realizatsii*. Kyiv: NADU, 400.
- Maissner, F., Naumenko, D., Radeke, Y. (2012). *Pidvyshchennia enerhoefektyvnosti v Ukraini: zmeshennia rehuliuвання ta stymuliuвання enerhozberezhennia*. Berlin/Kyiv: German Advisory Group, Institute for Economic Research and Policy Consulting, 25. Avail-

- able: [http://www.ier.com.ua/files/publications/Policy\\_papers/German\\_advisory\\_group/2012/PP\\_01\\_2012\\_ukr.pdf](http://www.ier.com.ua/files/publications/Policy_papers/German_advisory_group/2012/PP_01_2012_ukr.pdf)
13. Synytsia, S. (2010). *Enerhoefektyvnist v Nimechchyni – mozhlyvosti dlia Ukrainy*, 21. Available: [http://www.fes.kiev.ua/new/wb/media/publikationen/Zvit\\_Sinitsa\\_ukr\\_end.pdf](http://www.fes.kiev.ua/new/wb/media/publikationen/Zvit_Sinitsa_ukr_end.pdf)
  14. Mykytenko, V. V. (2004). *Enerhoefektyvnist promyslovoho vyrobnytstva*. Kyiv: Joint Institute of Economy NAS of Ukraine, 282.
  15. Mykytenko, V. V. (2005). *Formuvannia kompleksnoi systemy upravlinnia enerhoefektyvnistiu v haluziakh promyslovosti vyrobnytstva*. Kyiv: EksOb., 336.
  16. In: Kiely, T. (2010). *Energy efficiency: A compelling global resource*. McKinsey & Company. Available: [http://www.mckinsey.com/~media/mckinsey/dotcom/client\\_service/Sustainability/PDFs/A\\_Compelling\\_Global\\_Resource](http://www.mckinsey.com/~media/mckinsey/dotcom/client_service/Sustainability/PDFs/A_Compelling_Global_Resource)
  17. Pears, A. (2004). *Innovative and energy efficiency*. Sustainable Solutions and RMIT University, 4. Available: <http://www.naturaledge-project.net/documents/InnovationandEnergyEfficiency.doc>
  18. Gillingham, K., Newell, R. G., Palmer, K. (2009). *Energy Efficiency Economics and Policy*. Washington: Resources for the Future, 32. Available: <http://www.rff.org/files/sharepoint/WorkImages/Download/RFF-DP-09-13.pdf>
  19. Harvey, L. D. D. (2010). *Energy and the New Reality 1: Energy Efficiency and the Demand for Energy Services*. London: Earthscan, 603.
  20. Yang, M., Yu, X. (2015). *Energy Efficiency: Benefits for Environment and Society (Green Energy and Technology)*. London: Springer, 179. doi:10.1007/978-1-4471-6666-5
  21. McLean-Conner, P. (2009). *Energy Efficiency: Principles and Practices*. Oklahoma: PennWell, 201.
  22. In: Sioshansi, F. P. (2013). *Energy Efficiency: Towards the End of Demand Growth*. USA: Elsevier Inc., 688.
  23. Moeller, S. T. (2002). *Energy Efficiency: Issues and Trends*. New York: Nova Science Publishers Inc., 139.
  24. Schipper, L., Meyers, S., Howarth, R. B., Steiner, R., Holdren, J. (1992). *Energy Efficiency and Human Activity: Past Trends, Future Prospects*. Great Britain: Cambridge University Press, 369.
  25. Solmes, L. A. (2009). *Energy Efficiency: Real Time Energy Infrastructure Investment and Risk Management*. USA: Springer, 211. doi:10.1007/978-90-481-3321-5
  26. Hawkes, D., Forster, W. (2002). *Energy Efficient Buildings: Architecture, Engineering, and Environment*. USA: W. W. Norton & Company, 240.
  27. Waterfield, P. (2006). *The Energy Efficient Home: A Complete Guide*. UK: The Crowood Press Ltd., 176.
  28. Zambini, L. S. (2006). *Energy Efficiency*. New York: Nova Science Publishers Inc., 118.
  29. *Energy Efficiency Market Report 2016*. (2016). Paris: International Energy Agency. Available: [https://www.iea.org/eemr16/files/medium-term-energy-efficiency-2016\\_WEB.PDF](https://www.iea.org/eemr16/files/medium-term-energy-efficiency-2016_WEB.PDF)
  30. Rating 2013. *Ukrainian Energy Index (UEI)*. Available: <http://energy-index.scm.com.ua/uk/ratings/2013/>
  31. Shevtsov, A. I., Barannik, V. O., Zemliannyi, M. H., Riauzova, T. V. (2014). *Enerhoefektyvnist u rehionalnomu vymiri. Problemy ta perspektyvy*. Dnipropetrovsk: National Institute for Strategic Studies, 78. Available: <http://www.niss.gov.ua/articles/1616/>
  32. *Na shliakhu do Yevropy: pidkhody do enerhozberezhennia ta dosvid yevropejskykh krain*. Available: <http://www.t-energy.com.ua/images/file.php?id=2322>
  33. Dodonov, B. (2016). *Monitorynh enerhoefektyvnosti Ukrainy 2016*. Kyiv: NOSEP, 20. Available: <http://newsep.com.ua/media/news/854/files/Моніторинг%20енергоефективності%20України%202016.pdf>

## DEVELOPMENT OF PRODUCTIVE FORCES AND REGIONAL ECONOMY

### FORMATION OF ACTIVATION MECHANISM FOR INVESTMENT MAINTENANCE MANAGEMENT OF GAS INDUSTRY ENTERPRISES

page 42–50

The problematic aspects of the existing management mechanism of investment management of gas industry enterprises are analyzed in the article. The ways of their elimination are suggested in accordance with the Energy Strategy of Ukraine-2035 at different levels of its operation. The ways of improving the investment management mechanism of the enterprises in this industry on three levels are proved. Activation mechanism for investment maintenance management of gas industry enterprises is developed as result of research. Its implementation will allow enterprises of the industry to increase its investment attractiveness and effectively carry out the procedure for enterprises' entry to the market of initial public offering to raise the required amount of investment resources for the modernization of investigated industry.

**Keywords:** investment support, gas industry enterprises, mechanism for investment maintenance management of the enterprises.

#### References

1. *Enerhetychna stratehiia Ukrainy na period do 2035*. (2014). Kyiv. Available: [http://www.niss.gov.ua/public/File/2014\\_nauk\\_an\\_rozrobku/Energy%20Strategy%202035.pdf](http://www.niss.gov.ua/public/File/2014_nauk_an_rozrobku/Energy%20Strategy%202035.pdf)
2. IPO/SPO search. *PREQVECA*. Available: <http://www.preqveca.ru/placements/>
3. Sharpe, W., Alexander, G. J., Bailey, J. W. (1998). *Investments*. Ed. 6. Prentice Hall, 962.
4. Bodie, Z., Kane, A., Marcus, A. (2005). *Essentials of Investments*. Ed. 4. McGraw-Hill/Irwin, 726.
5. Gerasimchuk, V. G. (2005). Innovative-investment model of development of Ukrainian Economics. *Zbornik radova XIII naucno-strucna konferencija Industrijski sistemi IS, XI*. Herzeg Novi, Novi Sad: Fakultet tehnickih nauka, Odsek za industrijsko inzenjerstvo i menadzment, 19–22.
6. Dergachova, V. V. (2012). Innovatsionno-investitsionnaia sostavliaushchacha ustoiichivogo razvitiia energetiki Ukrainy. *Ekonomichnyi visnyk NTUU «KPI»*, 9, 15–23.
7. Knish, M. I. (2007). *Strategicheskoe planirovanie investitsionnoi deiatelnosti*. Saint Petersburg: Biznes-pressa, 1120.
8. Copeland, T., Koller, T., Murrin, J. (2000). *Valuation: Measuring and Managing the Value of Companies*. Ed. 3. John Wiley & Sons, 492.
9. McConnell, C. R., Brue, S. L., Flynn, S. M. (2011). *Economics: Principles, Problems, and Policies*. Ed. 19. McGraw-Hill Education, 896.
10. Martsyn, V. S. (2008). Orhanizatsiino-ekonomichniy mekhanizm zaluchennia inozemnykh investysii v ekonomiku Ukrainy. *Visnyk Universytetu bankivskoi spravy NBU*, 3, 52–57.
11. Tulchynska, S. O. (2008). Funktsionuvannia orhanizatsiino-ekonomichnoho mekhanizmu innovatsiinoho protsesu. *Stratehichni priorityty*, 1 (6), 98–106.
12. Tyshchenko, Yu. (2002). Ukrainysky nezaleznyi tsentr politychnykh doslidzhen hazotransportnoi systemy yak «velykyi natsionalnyi aktyv»: shliakh do pryvatyzatsii. *Ekonomichni reformy*, 24/272, 17.
13. Shandrivska, O. (2002). *Upravlinnia hazotransportnyimi kompaniiamy na zasadakh marketynhu ta lohistyky*. Lviv, 193.
14. Okhrimenko, O. O., Manaienko, I. M. (2014). Determinanty investysiiinoho zabezpechennia: pryntsyypy, mekhanizmy, efektyvnist. *Ekonomika rozvytku*, 1 (69), 34–40.
15. Pro zatverdzhennia Derzhavnoi stratehii rehionalnoho rozvytku na period do 2020 roku. *Decree of the Cabinet of Ministers of Ukraine from 08.06.2014 № 385*. Available: <http://zakon4.rada.gov.ua/laws/show/385-2014-п>
16. Kreidych, I. M. (2007). Derzhavne rehuliuвання investysiiinoi diialnosti. *Ekonomika ta derzhava*, 11, 18–23.
17. *Ukraine's Gas Sector Development in the Context of European Integration (Analytical Report)*. (2014). Kyiv. Available: [http://razumkov.org.ua/ukr/news.php?news\\_id=474](http://razumkov.org.ua/ukr/news.php?news_id=474)
18. *RBK-Ukraine*. Available: <http://www.rbc.ua>
19. *Kontsepsiia reformuvannia podatkovoi systemy*. Available: <http://www.me.gov.ua/Files/GetFile?fileId=af2c66dd-e98c-4a6a-92ee-51bfa904a7e9>