

урбанізованих територій. Під екологічним відбитком міста розуміється «площа, що забезпечує його життєдіяльність, і міра «навантаження» на природу, яка виникає в результаті задоволення різноманітних потреб міських мешканців» [2].

Взаємовплив і взаємопроникнення основних сфер життєдіяльності людини – соціальної, екологічної та економічної сфер, важко виявити, але згубно не враховувати при довгостроковому стратегічному плануванні. Неврахування ж економічного чинника може привести до загрози збереження зазначених об'єктів. Необхідною умовою для сталого розвитку урбанізованих територій, що дозволяє задовольнити потреби нинішнього покоління і не ставить під загрозу потреби майбутніх поколінь.

Таким чином, урбанізовані території або міста характеризуються складною багатофункціональною територіальною організацією. При переході до постіндустрії вони не тільки не втрачають своєї привабливості, а збільшують її. Урбанізовані території не мають конкретного визначення, однак відрізняються взаємопроникненням трьох сфер – соціальної, екологічної та економічної, з лідируючими інтересами людини.

В зв'язку з цим, в даний час найбільш актуальним і продуктивним підходом до вивчення, аналізу, довгострокового планування і управління урбанізованими територіями залишається класичний економіко географічний підхід, який би розглядав місто як цілісну територіальну соціально-екологічно-економічну систему.

Список використаних джерел:

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THE INTERRELATION ABOUT CITY AND NATIONAL ECOLOGICAL BIOCAPACITY AND FOOTPRINT

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As a beginning lets discuss a theoretical and essential concept of the subject. Every city in a world in a process of their everyday life faces problems, which appear as a result of different activities of enterprises, citizens, and their infrastructure. Let's define a cause, effect, and heart for each of these exemplary

participants. Enterprises presented as a business organization, which is aimed at producing goods and provision of services.

Inside this part, we talk about recycling – second time using resources which is already was used by plants and factories. Recycling is also can be used for waste products of citizens. As for these part, primarily we talk about sorting waste by categories, for example glass, plastic, paper etc.

Now we can talk about the ways how to in our opinion cities can improve their resources usage efficiency. First of all, let's define essential notions. Starting Resources (SR) it's a different material or any other things which are used by enterprises and factories in process of their activity. The second one is Already Worked off Resources (AWR) its materials and waste which is appeared in the result of production process and can't be used by the enterprise for another goal, AWR also can be called as trash.

Every City has own set of SR and AWR which is used and thrown out by local enterprises. Local area can be understood not only as a City Area, in additional it's a factory and manufactures in the immediate area around, which is can interact with City Infrastructure. The main point is a built a 2-layer infrastructure which will work with AWR of different users and compare it's to SR of other users, as a result, a huge part of a material which was trash before using this infrastructure can be used as SR by other enterprises (for example huge woodworking factory of the furniture factory, only using their AWR can provide much of needed SR for some amount of cutlery and toys manufacture). Built up of the first layer, starts from prepare and conduct a team of professionals which is been aimed at analyzing all of registered factories and manufactures to compare their SR and AWR and make a database, which shows expediency of launching Sustainability Infrastructure Project.

On the second layer, we must provide analyze of waste which produced and going to trashes by citizens, sure these steps require separate garbage collection. But here is, inside trash, a specialist can also find some of SR for different factories, for example, New Year Trees which is going to trash after holidays every year can be delivered to the firewood manufacture, etc. So second layer infrastructure require waste sorting and analysis of waste product to improving recycling, and positive effect on citizen footprint.

For the completion. Let's name and point motivation, or in other words underline WHY our Cites need's a Sustainability Infrastructure. Using the Open Data platform of Global Footprint Network, we can find information about Biocapacity per person and Ecological Footprint per person, if calculate the difference of these indexes, we can easily know how much every country effect on world ecology.

For better understanding of FOOTPRINT we must talk about GDP, more precisely about part of harmful industries inside every country GDP. Effective sustainable usage of recources give a way for a countree to make much bigger industries with lower FOOTPRINT. About BIOCAPACITY, it's a index which depends of the area of the country, and show us how much of AWR can be trashed.

In recent analyses conducted in the 2014 year, scientists count that for producing \$0.350 trillion (2015@indexMundi) GDP Ukraine effect on world with

1.76 Footprint compare to number of earth, as for France, they effect 2.79 Footprint for producing \$2.75 trillion (2015@indexMundi). Using a simple counting we can decide that for producing 1 trillion GDP Ukraine is use in 5 time`s more FOOTPRINT then France.

Compeering of Ukraine and France is objective because biocapacity of both countries is equal 2,7(opendata@Global Footprint network). These counting shows up necessity of improving Ukrainian industry and bussines rules up to European standards and higher.

INDIE ECONOMICS: NEW ECONOMICS PARADIGM

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Economics today is beginning to look like an expensive knowledge-producing conveyor. This is a high-budget industry represented by large highly specialized groups of authors with research funds which increases every year (Table 1). This situation in modern economics, not only in Ukraine but also in the EU countries, creates high entrance barriers in science for motivated and skillful individual researchers.

Besides it leads to government and private monopolies in science and large scientific organizations and communities' consolidation (Fig. 1); educational institutions dependence on budget funding. As a result, these processes lead to deficiency in economics with new ideas, approaches and methods, causing its centralization, technocratic narrowly focused specialization depending on funding.

Table 1 – R&D by sector, EU-28, 2006-2016, (% , relative to GDP)*

R&D Sector	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Business enterprise sector	1,12	1,12	1,16	1,19	1,19	1,24	1,27	1,28	1,30	1,31	1,32
Government sector	0,23	0,23	0,24	0,26	0,25	0,25	0,25	0,25	0,24	0,24	0,23
Higher education sector	0,39	0,40	0,42	0,46	0,47	0,46	0,47	0,47	0,47	0,47	0,47
Private non-profit sector	0,02	0,02	0,02	0,02	0,02	0,02	0,02	0,02	0,02	0,02	0,02

* Retrieved from: <https://ec.europa.eu/eurostat>

The solution of the problem can be a new flexible and transparent concept of economics: the 'indie-economics' paradigm as opposed to 'traditional economics'. The closest semantic terms to 'indie-economics' are 'indie-culture' and 'indie-capitalism'. 'Indie capitalism' was implemented by B. Nussbaum [1] as socially