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## **ENERGY HUMANITIES: HOW FUTURE MANAGERS CAN BENEFIT FROM SYNERGISM**

*Under consideration are the advantages of energy humanities – interdisciplinary research applying the methodology of humanities to study the patterns of consumption and conservation of energy. The question is raised about the usefulness of synergistic approaches to energy culture in academic settings to train managers who will face the necessity of change management.*

**Keywords:** interdisciplinary research, humanities, energy systems, change management, educational settings

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## **ГУМАНИТАРИСТИКА ДЛЯ ЭНЕРГОЭФФЕКТИВНОСТИ: ПРЕИМУЩЕСТВА СИНЕРГИИ ДЛЯ БУДУЩИХ МЕНЕДЖЕРОВ**

*Рассматриваются преимущества проведения междисциплинарных исследований, применяющих методологию гуманитаристики к изучению моделей потребления и сбережения энергии. Ставится вопрос о полезности синергических подходов при подготовке менеджеров, перед которыми будут стоять задачи управления изменениями.*

**Ключевые слова:** междисциплинарные исследования, гуманитаристика, энергетические системы, управление изменениями, образовательная среда

### **Introduction**

Historically, the distinction has always been made between humanities and sciences, the focus of humanities being the person (the individual), the society, the text (discourse), while the focus of sciences being the matter, both tangible and intangible. Interdisciplinary studies based on coupling humanities with sciences have been gaining an increasing relevance in the world of academia in the recent years, which can be accounted for by objective reasons: the major aims of humanities are to identify the place of humans in the world, to establish the contradictions of modern society, to indicate the prospects for societal development.

Along with fast technological advancement, the process of human development has brought about new challenges which, in turn, have given rise to the emergence of new interdisciplinary approaches, new academic courses and projects aimed to describe these challenges, find and offer solutions. At issue are the topics related to environmental citizenship, circular and green economy, sustainable consumption, climate change, energy production and use. Research has been carried out in environmental humanities, digital humanities, medical humanities and other since it is impossible to find expected solutions to burning problems without taking into account the human, social factor.

Alternatively, humanities can focus on identifying how we can avoid certain negative impacts of our own activity in the future.

The synergy of humanities and sciences is obviously beneficial: the humanities' heuristic approach helps obtain an insight into the current state of things, draw up the principles for further growth. Possessing huge heuristic potential, humanities provide the basics of analysis philosophy/methodology, alongside the tools to map history, to influence culture, to change mindset and behavior patterns.

### **Energy humanities definition and objectives**

The production of energy (what types) and its use (how much and for what purposes we consume) is deeply rooted in the foundations required for humankind growth and predetermines the way a country, a community functions; global warming and other modern-day challenges are in part explained by energy abuse and overuse. The dependence of countries, big and small alike, on energy is huge; the availability of and the access to energy sources, however, varies greatly. It is only logical to assume that the way of life and thinking, the material and the spiritual, will differ, too, depending on a country being energy-rich or energy-poor.

Energy humanities is a comparatively new, decade-old, field of scholarship which looks into the ways of how social, political, cultural structures interrelate with energy systems. It seeks to analyze and understand how accessibility to energy sources influences our values, beliefs and behavior. As Imre Szeman and Dominic Boyer who edited "Energy Humanities: An Anthology" published by Johns Hopkins University Press put it, "The task is nothing less than to reimagine modernity". An interesting observation: the anthology was printed on acid free paper. Energy humanities can "map out other ways of being, behaving and belonging in relation to both old and new forms of energy" [1, p. 12]. Energy humanities research is synonymous to looking into the ways to safeguard environmental protection and sustainable living.

The questions under consideration of energy humanities relate to energy and modernity, energy and politics, energy and ethics, energy in philosophy, aesthetics of petroculture [1]. Energy humanities have their own methods, such as nuclear criticism, ecocriticism, econarratology, etc. They feature their own meta-language. The vocabulary used in the discourse encompasses the following terms: energy humanities, energy justice, energy liberation, petroculture, plutonium economy, nuclear identity, nuclear phobia, wind rush. The field has become part of sustainability discourse raised at international conferences in Europe and America, for instance, in May, Finland will host Sustainability Science Days 2019 (University of Helsinki and Aalto University) [2].

### **Research relevance for Belarus**

According to the World Energy Council, the past decade has seen the major innovations in the cluster of energy, transport, information and the three are going to remain the main movers in the near future [3, p. 18]. Meanwhile, "energy firms are planning to increase fossil-fuel production", as stated by the Economist in February 2019 [4]. The reports are controversial, the topic of energy is ubiquitous; unfortunately, Belarus seldom features in serious global research, so it is crucial to educate future managers to be able to figure out where to move to and who with, to be prepared to manage change brought about by the global energy transition.

Energy humanities, a rather in-trend field, is not widely known in this country, with Belarusians showing almost complete unawareness of the existing studies and their benefits. In this regard, the situation is similar to what my colleagues recently discussed while talking about ecology of education [5, p. 102]. Ecology-environment issues are mainly studied by science teachers/researchers rather than humanities teachers/researchers. A lot of people do not link societal issues, humanities, with industry and science, or energy. At the same time, as the demand is constantly growing, everyone understands the paramount importance of energy supply.

Belarus will undoubtedly benefit from any research in the field of energy humanities, being a country with a shortage in certain energy types. We are certain to benefit from the results obtained in surveys and analyses which will identify the level of awareness about the interconnection

of socio-cultural patterns with energy, Belarusian people's readiness to redefine values and alter attitudes towards sustainable use of resources.

### **Benefits for would-be managers**

Some of the topics taught in the English language to the undergraduate students of the Business School focus on sustainable consumption and renewable energy in Belarus. A few projects are carried out within the relevant courses, for instance "green university" project [6, p. 185], which aim to find out what types of energy students consider up-and-coming for the future and how a business can be energy-efficient. A project within the course of corporate social responsibility aims to teach the School of Business students to devise a strategy for a public organization or a private business to be socially responsible, transparent, sustainable, energy efficient.

Out of 42 students in their first year who took part in the alternative energy survey, all the students (100 %) believe that Belarus has a huge potential in increasing the use of renewable energy sources: solar (41 %), bio-fuel/biogas/biomass (40 %), wind (11 %). Besides, the term "green energy" was mentioned by some 8 % of students rather than "renewable". About 14 % foresee potential problems with energy overproduction and sale after the NPP launch: we will be producing more than we consume.

Observations and interviews with students, however, illustrate a typically Belarusian attitude to energy conservation: we know how important it is to save energy, to be energy-efficient, but we do not have integrity needed to practice what we believe in. Knowing is not synonymous with doing. We can hardly be called disrupters who are willing to make a vital transition and change the routine behavior. Consequently, we are lagging behind the western societies in mentality which could produce a better energy resources management.

When asked if they pay attention to their own overuse of energy, the students gave a negative answer. Everyone supports paperless education and use of all study resources in digital formats; nobody, however, is willing to cut down the time spent aimlessly surfing the Internet, and no one links energy over-use with their own online behavior. Moreover, not everyone is ready to abstain from established habits. One more example, the interrelation between petrol consumption and environmental problems is a well-known fact; half of the students doubt their families are ready to use green transport, use public transport more often and buy electric automobiles.

Energy humanities research can help give answers how to change the habits and help future managers choose the ethical and responsible practices of energy consumption. Students themselves can contribute to research by doing projects and presenting at student conferences. Moreover, it is useful to engage business school students into research as they are enthusiastic and possess a fresh perspective.

Potential fields of study relevant to Belarusians can cover the following topics related to this country:

- ethical aspects of energy use and abuse by companies and individuals;
- an average person's awareness of energy problems;
- political discourse on energy;
- the impact of a person's background and upbringing on energy consumption patterns;
- traditional media (the press) coverage of energy production/consumption (discourse analysis);
- looking at social media approaches to energy issues, if any;
- classical Belarusian literature analysis (with energy in focus).

Other areas of study can be centered on various cultures, moving beyond Belarus, and they can be described as follows:

- reviewing films (dystopias) released by foreign producers or books written by foreign authors,
- comparing and/or contrasting energy-producing companies' web-sites and their social media profiles,
- study of energy-based social advertisement's impacts on an average person's behavior,

– comparing and/or contrasting Belarusian and foreign values, beliefs, habits, stereotypes, etc., concerning energy.

All these areas and many more could be of interest to business school students and humanities teachers. As a result, the expected benefits can be briefly described below:

– raising awareness of the existing links between models of energy use and cultural, social and political aspects of life;

– changing beliefs, habits of and attitudes towards the use of energy by individuals, managers and employees of companies;

– minimizing the use of non-renewable energy sources;

– encouraging the use of energy-efficient practices at home and in the workplace.

### **Conclusion**

To sum up, it is necessary to underscore that changing attitudes which lie deep down the cultural iceberg is not an easy task; but it is a lot easier to achieve it when new models are instilled in the young generation, in those who are flexible and fast learners and who will be leaders of the future. Thus, energy humanities possess a huge research and educational potential for Belarus.

The findings of studies that will be obtained thanks to the synergy of energy sciences and humanities can explain socio-political issues in the country, as well as those related to the broader concepts of culture, can help develop relations globally and open up easier ways to shape the habits of sustainable lifestyles. Future managers will receive the necessary tools to manage energy resources effectively and efficiently, the tools to manage any change or transition ahead when they start their working career upon graduation.

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