

- создание и обеспечение соблюдения адекватных правовых рамок, которые будут защищать общественные интересы и подкреплять ответственную деловую практику, а также обеспечивать мониторинг эффективности бизнеса и соблюдения нормативной правовой базы,
- формирование структуры побудительных мотивов субъектов хозяйствования, уменьшение неопределенности рыночной среды, снижение транзакционных издержек и организация хозяйственной деятельности,
- содействие добросовестному посредничеству и конкуренции,
- обеспечение качественной логистической инфраструктуры (порты, аэропорты, железные дороги, дороги), совершенствование пограничных правил, таких как таможенный и санитарный контроль, сокращение/оптимизация тарифов и налогов, развитие человеческого капитала, создание благоприятных условий для средних и малых фирм для их интеграции в региональные и глобальные цепочки поставок,
- проведение мер по предотвращению возможных и выявлению потенциальных рисков, подготовка политических мер реагирования в случае наступления непредвиденных обстоятельств и др.

Библиографические ссылки

1. Медведев В. Л. Инструменты развития региональной товаропроводящей сети: дис. ... к.э.н.: 08.00.05. / Государственное образовательное учреждение высшего профессионального образования «Сибирский государственный аэрокосмический университет им. академика М. Ф. Решетнева». Красноярск, 2007. 183 с.
2. Fioravanti R. Do Governments have a role to play in Supply Chains? : site. URL: <https://blogs.iadb.org/transporte/en/do-governments-have-a-role-to-play-in-supply-chains/> (date of access: 18.02.2022).
3. Keys to Resilient Supply Chains: Policy Tools for Preparedness and Responsiveness : site. URL: <https://www.oecd.org/trade/resilient-supply-chains/> (date of access: 04.02.2022).
4. Упрощение процедур торговли: принципы и выгоды : сайт. Практическое руководство по упрощению процедур торговли / ООН. URL: <https://tfig.unece.org/RUS/details.html> (дата обращения: 08.02.2022).
5. Юдкевич М. Институциональная экономика : сайт / НИУ ВШЭ. URL: <https://www.coursera.org/learn/institutional-economics/home/welcome> (дата обращения: 12.09.2021).
6. Девяткова О. И. Организационно-институциональный аспект государственного регулирования экономики : сайт. URL: [http://www.unn.ru/pages/issues/vestnik/99990193_West_econ_finans_2005_1\(7\)-/37.pdf](http://www.unn.ru/pages/issues/vestnik/99990193_West_econ_finans_2005_1(7)-/37.pdf) (дата обращения: 01.02.2022).
7. Панибратов А. Влияние государства на интернационализацию российских компаний: стимул или барьер? : сайт / Центр Россия / ННГ. URL: https://www.ifri.org/sites/default/files/atoms/files/ifri_and-rey_panibratov_russian_compagnies_rus_december_2013.pdf (дата обращения: 10.02.2022).
8. Система экономических институтов Республики Беларусь / А. Е. Дайнеко и др.; под общ. ред. А. Е. Дайнеко. Минск : Беларуская навука, 2015. 279 с.
9. State enterprises in the steel sector : site / Directorate for Science, Technology and Innovation Steel committee // OECD. 20 December 2018. URL: [http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=DSTI/SC\(2017\)10/FINAL&docLanguage=En](http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=DSTI/SC(2017)10/FINAL&docLanguage=En) (date of access: 01.02.2022).

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COMPARISON OF KEY MECHANISMS IN A LINEAR AND A CIRCULAR ECONOMY

V. V. Alhanaqtah¹, Ma Haochen²

¹ PhD in economics, associate professor, Belarusian State University, faculty of economics, Minsk, Republic of Belarus, e-mail: yer-grabko@yandex.ru

² master student, Belarusian State University, faculty of economics, Minsk, Republic of Belarus, e-mail: mahaochen699@gmail.com

The report dwells on the comparison of a standard linear economy and a new circular economy from three perspectives: business, consumer and policy. Economic, command-and-control and public-private incentives to promote circularity are considered.

Keywords: circular economy; linear economy; business perspective; consumer perspective; policy perspective; economic; command-and-control; public-private incentives.

СРАВНИТЕЛЬНАЯ ХАРАКТЕРИСТИКА КЛЮЧЕВЫХ МЕХАНИЗМОВ ЛИНЕЙНОЙ И ЦИРКУЛЯРНОЙ ЭКОНОМИКИ

В. В. Альханакта¹⁾, Ма Хаочен²⁾

¹⁾ кандидат экономических наук, доцент, Белорусский государственный университет, экономический факультет, г. Минск, Республика Беларусь, e-mail: ver-grabko@yandex.ru

²⁾ магистрант, Белорусский государственный университет, экономический факультет, г. Минск, Республика Беларусь, e-mail: mahaochen699@gmail.com

В докладе проводится сравнение стандартной линейной экономики и новой циркулярной экономики с точки зрения бизнеса, потребителей и политики. Приводятся меры экономического, административного и общественного стимулирования перехода к циркулярной экономике.

Ключевые слова: циркулярная экономика; линейная экономика; бизнес-перспектива; потребительская перспектива; политическая перспектива; экономические; административные и общественные стимулы.

The traditional model of the process from production to consumption and then a disposal is linear. This is a linear economy concept of make, use, and a dispose. Essentially, it involves taking something from the ground, manufacturing it into a product that is sold and then used, and ultimately throwing it away. In other words, the traditional concept is based on a system of obsolescence of the throw-away culture, where manufacturers want consumers to use their products and then replace them after five or ten years as part of their business model.

The circular economy concept runs completely counter to this concept and takes a much longer-term view, where all elements play a continuous role and are re-used. Here, the focus shifts from throw-away to reusing or recycling as much as possible, and from the product itself to performance or service-related functions. This type of a system inherently designs out waste, preserves valuable natural resources, and decreases overall costs as a price of raw materials is decoupled from manufacturing. The extraction and manufacturing of materials can represent up to 75 % of the energy used to make products [1]. So, we can imagine how dramatically our energy needs would decrease if re-manufacturing was introduced.

There is no clear or standardized definition of a circular economy. The circular economy is an alternative to the traditional linear economy and is based on some basic principles:

- Disassociation: decoupling of economic growth from natural resource consumption and degradation of an ecosystem.
- Value extraction: maximum value is extracted from resources while they are in use, which are then recovered and regenerated into new products and the end of the service life.
- Closed loop: this forms a closed or circular loop, where waste generation is minimized as much as possible [2].

First, let's consider linear and circular system mechanisms from a *business perspective*.

In a linear economy product is a value creation source while in the circular economy the source of value creation is the functionality and performance of a product.

In a circular economy location of production matters. There is an incentive to make it closer to the customer. In a linear economy cost efficiency is the driver for optimization of global production chains in terms of resources, transport, and labor.

In a linear economy, products with a shorter life are preferred because they are cheaper and support a market for new products to replace, which is more profitable than a mechanism of a circular economy that favors offering the best service, including repairs. In other words, in linear economy consumer needs are pushed towards a new product; in a circular economy consumers' needs and wants determine the role of a product.

As far as the end-of-life phase of a product, a linear economy doesn't provide incentives for re-use, recycling or remanufacture of a product. Many products end up at dumpsites. There are internal incentives in a circular economy to incorporate the end-of-life phase into a business model. Products are considered as assets so there is a tendency to minimize life-cycle costs [3].

Second, let's consider linear and circular system mechanisms from a *consumer perspective*.

In a circular economy, a consumer must match needs with the available product offering. Consumerism is cherished, and it follows marketing. In a circular economy, the important driver is a consumer's satisfaction. Consumers raise awareness of the actual needs and wants and in some cases, they act as co-producers of the product/service they need.

In a circular economy location and accessibility of a product matter. Proximity is an important customer choice criterion. In a linear economy, consumers seek cheaper products, and e-commerce makes them available.

In a linear economy, the norm is ownership while in a circular economy the norm is accessibility. Consumers may access products they need through customized services, via sharing economy. A circular economy cherishes repair of a product while a linear economy considers repairing as too expensive (buying a new product is cheaper) and too difficult (due to protective product design).

As far as end-of-use incentives, they are incorporated in a circular economy, and they are aimed at the return of the product to the provider after its usage, avoiding keeping at the household as a stock or illegal dumping. In a linear economy used products are a burden which is preferred to dispose of as cheaply as possible, whether as stocks at home or selling on second-hand markets, or even illegal dumping or incineration [3].

Finally, let's consider linear and circular system mechanisms from a *policy perspective*.

There is a strong link in a linear economy between mass production on one hand and cost efficiency (with lower salaries and less job creation) on the other hand. In a circular economy, there is a focus on affordable and skilled workers. Taxes are favored to be shifted from labor to resources.

In a linear economy competition of economic factors, international trade determines environmental and social policy. In a circular economy, there are much fewer incentives for race-to-the bottom in environmental and social policies.

In a circular economy, such issues as safety and consumers' health are facilitated. There are corresponding policies. In a linear economy, such issues are usually reactive, and the whole protection is usually geared towards the protection of existing economic rules (like VAT incomes).

In a linear economy, there are no internal incentives to regulate the end-of-life phase of a product. Actions are taken only when there is a visible threat to the environment or health. In a circular economy, extended producer's responsibility principle is a focus of internalization of negative externalities in waste management. Governments support reverse logistics with fiscal measures and corresponding infrastructure [3].

What are the instruments to promote circularity (table 1)?

To resume, a linear economy has underpinned the expansion of the global economy. Material prosperity is linked to the extraction of new resources without taking into account the pressure on the environment, which is not considered as a cost. As the world population grows, demands for goods and services also necessarily grow. To achieve Sustainable Development Goal 12 on responsible consumption and production [5] requires the transition from an obsolete linear economy, reaching its limits, to a circular economy with its advantages.

Table 1 – Instruments for promoting circularity

Economic	Command and control	Public-private
Landfill and/or incineration taxes	Waste disposal and trade standards	Improved logistics and infrastructure
Different taxation levels for recycled/reused products	Minimum recycling requirements	Circularity certification and labeling schemes
Reduced value-added taxes for reuse and repair services	Deposit refund system (for example, for plastic bottles)	Extended producer responsibility schemes
Increased taxes on non-reparable products	Circular public procurement	Discounts for efficiency
Tax shifts from labor to consumption	Waste disposal and trade standards	Products designed for recycling
Incentives for access over ownership	Extended legal warranties	Virtual platforms for asset sharing
	Streamlined regulation for leasing and sharing businesses	

Source: [4].

References

1. Schroder P. Promoting a Just Transition to an Inclusive Circular Economy // Energy, Environment and Resource Programme. April 2020. 33 p.
2. Preston F., Lehne J., Wellesley L. An Inclusive Circular Economy: Priorities for Developing Countries. Energy, Environment and Resources Department. May 2019. 82 p.
3. Circular by design. Products in the circular economy: EEA Report 6/2017. 56 p.
4. Circular economy: the new normal? // Policy Brief. № 61. May 2018. 4 p.
5. Sustainable development goals.

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СОВРЕМЕННАЯ УПРАВЛЕНЧЕСКАЯ ПАРАДИГМА

Т. Н. Алиев

*аспирант, Белорусский государственный университет, экономический факультет,
г. Минск, Республика Беларусь, e-mail: tihonovale@mail.ru*

Научный руководитель: **Л. Е. Тихонова**

*доктор экономических наук, профессор, Белорусский государственный университет,
экономический факультет, г. Минск, Республика Беларусь, e-mail: tihonovale@mail.ru*

В статье рассматривается современная управленческая парадигма смысл которой состоит в изучении основных научных терминов и установок, а также идей, принятых и распространяемых научным сообществом. Управленческая парадигма отражает степень профессионализма субъекта управления и включает когнитивный, аналитический, ценностный, творческий и организационно-волевой компоненты.

Ключевые слова: понятие о парадигме; современная управленческая парадигма; виды парадигмы.

CONTEMPORARY MANAGEMENT PARADIGM

T. N. Aliev

*PhD student, Belarusian State University, faculty of economics, Minsk,
Republic of Belarus, e-mail: tihonovale@mail.ru*