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«KHARKIV POLYTECHNICAL INSTITUTE»

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METHODOLOGICAL GUIDANCE

for a practical work

**"Grant and start-up applications correspondence to
sustainable development goals"**

on the courses "Ecology"

for students of specialty 185 "Oil and gas engineering and technologies"
of all educational forms

Kharkiv
NTU «KhPI»

2023

МІНІСТЕРСТВО ОСВІТИ І НАУКИ УКРАЇНИ

НАЦІОНАЛЬНИЙ ТЕХНІЧНИЙ УНІВЕРСИТЕТ
«ХАРКІВСЬКИЙ ПОЛІТЕХНІЧНИЙ ІНСТИТУТ»

МЕТОДИЧНІ ВКАЗІВКИ

до практичного заняття
на тему
«Відповідність грантових та старт-ап заявок цілям сталого розвитку»
з курсу «Екологія»
для студентів спеціальності 185 «Нафтогазова інженерія та технології»
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Methodical guidance for a practical work on the topic " Grant and start-up applications correspondence to sustainable development goals " from the course "Ecology", for students of the specialty 185 "Oil and gas engineering and technologies" of all forms of education / comp. T.S. Tykhomyrova, O.V. Shestopalov, T.B. Novozhilova - Kharkiv: NTU "KhPI". - 30 p.

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INTRODUCTION

Sustainable development is an organizing principle for meeting human development goals while also sustaining the ability of natural systems to provide the natural resources and ecosystem services on which the economy and society depend. The desired result is a state of society where living conditions and resources are used to continue to meet human needs without undermining the integrity and stability of the natural system.

Nearly all the countries in the world have promised to improve the planet and the lives of its citizens by 2030.

They've committed themselves to 17 life-changing goals, outlined by the UN in 2015. These targets, known as the Sustainable Development Goals (SDGs), include ending extreme poverty, giving people better healthcare, and achieving equality for women.

The aim is for all countries to work together to ensure no one is left behind. Here you can read about the goals and learn how Sightsavers is helping to achieve them.

A grant is a way the government or private, nongovernmental organisations funds your ideas and projects to provide public services and stimulate the economy.

Startups are businesses that want to disrupt industries and change the world—and do it all at scale. Startup founders dream of giving society something it needs but hasn't created yet—generating eye-popping valuations that lead to an initial public offering (IPO) and an astronomical return on investment.

Nowadays most application forms for grant an starup projects contains part, that asks about correspondence of main idea (or task) of your project to sustainable development goals and can help in their achievement.

This methodological guidance trains students to choose correspondence between their projects and sustainable development goals.

PRACTICAL WORK

Grant and start-up applications correspondence to sustainable development goals

Time: 3 clases (6 hours)

1. Detailed description of sustainable developmen goals (SDG`s)

Sustainable development goal #1 and its targets

Table 1 – SDG #1 and its targets

Full text of SDG#1	Targets	
	Short text	Full text
No poverty	1.1 Eradicate extreme poverty	By 2030, eradicate extreme poverty for all people everywhere, currently measured as people living on less than \$1.90 a day
	1.2 Reduce poverty by at least 50%	By 2030, reduce at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions
	1.3 Implement nationally appropriate social protection systems	Implement nationally appropriate social protection systems and measures for all, by 2030 achieve substantial coverage of the poor and the vulnerable
	1.4 Equal rights to ownership, basic services, technology, and economic resources	By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including micro-finance
	1.5 Build resilience to environmental, economic, and social disasters	By 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters.
	1.a Mobilization of resources to end poverty	Ensure significant mobilization of resources from a variety of sources, including through enhanced development cooperation in order to provide adequate and predictable means for developing countries particularly least developed countries.
	1.b Establishment of poverty eradication policy frameworks at all levels	Create sound policy frameworks at the national, regional and international levels, based on pro-poor and gender-sensitive development strategies, to support accelerated investment in poverty eradication actions.

Sustainable development goal #2 and its targets

Table 2 – SDG #2 and its targets

Full text of SDG#2	Targets	
	Short text	Full text
End hunger, achieve food security and improved nutrition and promote sustainable agriculture	2.1 Universal access to safe and nutritious food	By 2030 end hunger and ensure access by all people, in particular the poor and people in vulnerable situations including infants, to safe, nutritious and sufficient food all year round
	2.2 End all forms of malnutrition	By 2030 end all forms of malnutrition, including achieving by 2025 the international agreed targets on stunting and wasting in children under five years of age, and address the nutritional needs of adolescent girls, pregnant and lactating women, and older persons.
	2.3 Double the productivity and incomes of small-scale food producers	By 2030 double the agricultural productivity and the incomes of small-scale food producers, particularly women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets, and opportunities for value addition and non-farm employment
	2.4 Sustainable food production and resilient agricultural practices	By 2030 ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters, and that progressively improve land and soil quality
	2.5 Maintain the genetic diversity in food production	By 2020 maintain genetic diversity of seeds, cultivated plants, farmed and domesticated animals and their related wild species, including through soundly managed and diversified seed and plant banks at national, regional and international levels, and ensure access to and fair and equitable sharing of benefits arising from the utilization of genetic resources and associated traditional knowledge as internationally agreed.
	2.a Invest in rural infrastructure, agricultural research, technology and gene banks	increase investment, including through enhanced international cooperation in rural infrastructure, agricultural research and extension services, technology development, and plant and livestock gene banks to enhance agricultural productive capacity in developing countries, in particular in the least developed countries
	2.b Prevent agricultural trade restrictions, market distortions and export subsidies	Correct and prevent trade restrictions and distortions in world agricultural markets, including the parallel elimination of all forms of agricultural export subsidies and all export measures with equivalent effect, in accordance with the mandate of the Doha Development Round

Full text of SDG #2	Targets	
	Short text	Full text
	2.c Ensure stable food commodity markets and timely access to information	Adopt measures to ensure the proper functioning of food commodity markets and their derivatives, and facilitate timely access to market information, including on food reserves, in order to help limit extreme food price volatility

Sustainable development goal #3 and its targets

Table 3 – SDG #3 and its targets

Full text of SDG#3	Targets	
	Short text	Full text
Ensure healthy lives and promote well-being for all at all ages	3.1 Reduce maternal mortality	By 2030, reduce the global maternal mortality ratio to less than 70 per 100,000 live births
	3.2 End all preventable deaths under five years of age	By 2030, end preventable deaths of newborns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births and under-5 mortality to at least as low as 25 per 1,000 live births
	3.3 Fight communicable diseases	By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases
	3.4 Reduce mortality from non-communicable diseases and promote mental health	By 2030, reduce by one-third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being
	3.5 Prevent and treat substance abuse	Strengthen the prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol
	3.6 Reduce road injuries and deaths	By 2020, halve (50% less) the number of global deaths and injuries from road traffic accidents
	3.7 Universal access to sexual and reproductive care, family planning and education	By 2030, ensure universal access to sexual and reproductive health-care services, including for family planning, information and education, and the integration of reproductive health into national strategies and programs
	3.8 Achieve universal health coverage	Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all

Full text of SDG#3	Targets	
	Short text	Full text
Ensure healthy lives and promote well-being for all at all ages	3.9 Reduce illnesses and deaths from hazardous chemicals and pollution	By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination
	3.a Implement the WHO framework convention on tobacco control	Strengthen the implementation of the World Health Organization Framework Convention on Tobacco Control in all countries, as appropriate
	3.b Support research, development and universal access to affordable vaccines and medicines	Support the research and development of vaccines and medicines for the communicable and non-communicable diseases that primarily affect developing countries, provide access to affordable essential medicines and vaccines, in accordance with the Doha Declaration on the TRIPS Agreement and Public Health, which affirms the right of developing countries to use to the full the provisions in the Agreement on Trade-Related Aspects of Intellectual Property Rights regarding flexibilities to protect public health, and, in particular, provide access to medicines for all
	3.c Increase health financing and support health workforce in developing countries	Substantially increase health financing and the recruitment, development, training and retention of the health workforce in developing countries, especially in the least developed countries and small island developing states
	3.d Improve early warning systems for global health risks	Strengthen the capacity of all countries, in particular developing countries, for early warning, risk reduction and management of national and global health risks

Sustainable development goal # 4 and its targets

Table 4 – SDG #4 and its targets

Full text of SDG#4	Targets	
	Short text	Full text
Ensure inclusive and equitable quality education and promote lifelong	4.1 Free primary and secondary education	By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to a relevant and effective learning outcome
	4.2 Equal access to quality pre-primary education	By 2030, ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education

Full text of SDG#4	Targets	
	Short text	Full text
Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	4.3 Equal access to affordable technical, vocational, and higher education	By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university
	4.4 Increase the number of people with relevant skills for financial success	By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship
	4.5 Eliminate all discrimination in education	By 2030, eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples and children in vulnerable situations.
	4.6 Universal literacy and numeracy	By 2030, ensure that all youth and a substantial proportion of adults, both men, and women, achieve literacy and numeracy
	4.7 Education for sustainable development and global citizenship	By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development
	4.a Build and upgrade inclusive and safe schools	Build and upgrade education facilities that are child, disability and gender sensitive and provide safe, non-violent, inclusive and effective learning environments for all
	4.b Expand higher education scholarships for developing countries	By 2020, substantially expand globally the number of scholarships available to developing countries, in particular least developed countries, small island developing States and African countries, for enrollment in higher education, including vocational training and information and communications technology, technical, engineering and scientific programs, in developed countries and other developing countries
	4.c Increase the supply of qualified teachers in developing countries	By 2030, substantially increase the supply of qualified teachers, including through international cooperation for Teacher training in developing countries, especially least developed countries and small island developing States

Sustainable development goal # 5 and its targets

Table 5 – SDG #5 and its targets

Full text of SDG#5	Targets	
	Short text	Full text
Achieve gender equality and empower all women and girls	5.1 End discrimination against women and girls	End all forms of discrimination against all females everywhere
	5.2 End all violence against and exploitation of women and girls	Eliminate all forms of violence against all females in the public and private spheres including trafficking, sexual and other types of exploitation
	5.3 Eliminate forced marriages and genital mutilation	<p>Eliminate all harmful practices, such as child, early and forced marriage and female genital mutilation (FGM) evidence shows that there is no health benefit in the case of female genital mutilation</p> <p>Eliminating harmful practices is a way of ensuring that girls are able to live their live full potential lives without any harm. Reducing these risk allows for girls pursue their education, own their bodily autonomy and eventually become productive members of the social, economic and political processes. Educating women has a direct proportional relation with the development of the community.</p>
	5.4 Value unpaid care and promote shared domestic responsibilities	Recognise and value unpaid care and domestic work through the provision of public services, infrastructure and social protection policies and the promotion of shared responsibility within the household and the family as nationally appropriate
	5.5 Ensure full participation in leadership and decision-making	Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life
	5.6 Universal access to reproductive rights and health	Ensuring universal access to sexual and reproductive health and reproductive rights as agreed in accordance with the Program-me of Action of the International Conference on Population and Development and the Beijing Platform for Action and the outcome documents of their review conferences
	5.a Equal rights to economic resources, property ownership and financial services	Undertake reforms to give women equal rights to economic resources, as well as access to ownership and control over land and other forms of property, financial services, inheritance and natural resources, in accordance with national laws

Full text of SDG#5	Targets	
	Short text	Full text
	5.b Promote empowerment of women through technology	Enhance the use of enabling technology, in particular information and communications technology, to promote the empowerment of women
	5.c Adopt and strengthen policies and enforceable legislation for gender equality	Adopt and strengthen sound policies and enforceable legislation for the promotion of gender equality and the empowerment of all women and girls at all levels

Sustainable development goal # 6 and its targets

Table 6 – SDG #6 and its targets

Full text of SDG#6	Targets	
	Short text	Full text
Ensure availability and sustainable management of water and sanitation for all	6.1 Safe and affordable drinking water	By 2030, achieve universal and equitable access to safe and affordable drinking water for all
	6.2 End open defecation and provide access to sanitation and hygiene	By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations
	6.3 Improve water quality, wastewater treatment, and safe reuse	By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally. This is also a sanitation-related target, as wastewater treatment is part of sanitation
	6.4 Increase water-use efficiency and ensure freshwater supplies	By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity.
	6.5 Implement IWRM	By 2030, implement integrated water resources management at all levels, including through transboundary cooperation as appropriate
	6.6 Protect and restore water-related ecosystems	"By 2020, protect and restore water-related ecosystems, including mountains, forests rivers, aquifers and lakes

Full text of SDG#6	Targets	
	Short text	Full text
	6.a Expand water and sanitation support to developing countries	By 2030, expand international cooperation and capacity-building support to developing countries in water- and sanitation-related activities and programmes, including water harvesting, desalination, water efficiency, wastewater treatment, recycling, and reuse technologies
	6.b Support local engagement in water and sanitation management	Support and strengthen the participation of local communities in improving water and sanitation management

Sustainable development goal # 7 and its targets

Table 7 – SDG #7 and its targets

Full text of SDG#7	Targets	
	Short text	Full text
Ensure access to affordable, reliable, sustainable and modern energy for all	7.1 Universal access to modern energy	By 2030, ensure universal access to affordable, reliable and modern energy services
	7.2 Increase global percentage of renewable energy	By 2030, increase substantially the share of renewable energy in the global energy mix
	7.3 Double the improvement in energy efficiency	By 2030, double the global rate of improvement in energy efficiency
	7.a Promote access to research, technology and investments in clean energy	By 2030, enhance international cooperation to facilitate access to clean energy research and technology, including renewable energy, energy efficiency and advanced and cleaner fossil-fuel technology, and promote investment in energy infrastructure and clean energy technology
	7.b Expand and upgrade energy services for developing countries	By 2030, expand infrastructure and upgrade technology for supplying modern and sustainable energy services for all in developing countries, in particular least developed countries, small island developing States, and land-locked developing countries, in accordance with their respective programs of support.

Sustainable development goal # 8 and its targets

Table 8 – SDG #8 and its targets

Full text of SDG#8	Targets	
	Short text	Full text
Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all	8.1 Sustainable economic growth	Sustain per capita economic growth in accordance with national circumstances and, in particular, at least 7 per cent gross domestic product growth per annum in the least developed countries
	8.2 Diversify, innovate and upgrade for economic productivity	Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high-value added and labour-intensive sectors
	8.3 Promote policies to support job creation and growing enterprises	Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation
	8.4 Improve resource efficiency in consumption and production	Improve progressively, through 2030, global resource efficiency in consumption and production and endeavour to decouple economic growth from environmental degradation, in accordance with the 10-Year Framework of Programs on Sustainable Consumption and Production, with developed countries taking the lead
	8.5 Full employment and decent work with equal pay	By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value
	8.6 Promote youth employment, education and training	By 2020, substantially reduce the proportion of youth not in employment, education or training. Unlike most SDG targets set for the year 2030, this is set to be achieved by 2020
	8.7 End modern slavery, trafficking, and child labour	Take immediate and effective measures to eradicate forced labour, end modern slavery and human trafficking and secure the prohibition and elimination of the worst forms of child labour, including recruitment and use of child soldiers, and by 2025 end child labour in all its forms
	8.8 Protect labour rights and promote safe working environments	Protect labour rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment
	8.9 Promote beneficial and sustainable tourism	By 2030, devise and implement policies to promote sustainable tourism that creates jobs and promotes local culture and products

Full text of SDG#8	Targets	
	Short text	Full text
	8.10 Universal access to banking, insurance and financial services	Strengthen the capacity of domestic financial institutions to encourage and expand access to banking, insurance and financial services for all
	8.a Increase aid for trade support	Increase Aid for Trade support for developing countries, in particular, least developed countries, including through the Enhanced Integrated Framework for Trade-related Technical Assistance to Least Developed Countries
	8.b Develop a global youth employment strategy	By 2020, develop and operationalize a global strategy for youth employment and implement the Global Jobs Pact of the International Labour Organization

Sustainable development goal # 9 and its targets

Table 9 – SDG #9 and its targets

Full text of SDG#9	Targets	
	Short text	Full text
Build resilient infrastructure, promote inclusive and sustainable industrialization, and foster innovation	9.1 Develop sustainable, resilient and inclusive infrastructures	Develop quality, reliable, sustainable and resilient infrastructure, including regional and trans-border infrastructure, to support economic development and human well-being, with a focus on affordable and fair access for all
	9.2 Promote inclusive and sustainable industrialization	Promote inclusive and sustainable industrialization, and by 2030, to raise significantly the industry's share of employment and GDP in line with national circumstances as well as to double its share in least developed countries
	9.3 Increase access to financial services and markets	Increase the access of small-scale industrial and other enterprises, particularly in developing countries, to financial services including affordable credit and their integration into value chains and markets
	9.4 Upgrade all industries and infrastructures for sustainability	By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities

Full text of SDG#9	Targets	
	Short text	Full text
Build resilient infrastructure, promote inclusive and sustainable industrialization, and foster innovation	9.5 Enhance research and upgrade industrial technologies	Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, in particular developing countries, including, by 2030, encouraging innovation and substantially increasing the number of research and development workers per 1 million people and public and private research and development spending
	9.a Facilitate sustainable infrastructure development for developing countries	Facilitate sustainable and resilient infrastructure development in developing countries through enhanced financial, technological and technical support to African countries, least developed countries, landlocked developing countries and Small Island Developing States
	9.b Support domestic technology development and industrial diversification	Support domestic technology development, research and innovation in developing countries, including by ensuring a conducive policy environment for, inter alia, industrial diversification and value addition to commodities
	9.c Universal access to information and communications technology	Significantly increase access to information and communications technology and strive to provide universal and affordable access to the Internet in least developed countries by 2020

Sustainable development goal # 10 and its targets

Table 10 – SDG #10 and its targets

Full text of SDG#10	Targets	
	Short text	Full text
Reduce income inequality within and among countries	10.1 Reduce income inequalities	"By 2030, progressively achieve and sustain income growth of the bottom 40 per cent of the population at a rate higher than the national average
	10.2 Promote universal social, economic and political inclusion	By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status
	10.3 Ensure equal opportunities and end discrimination	Ensure equal opportunity and reduce inequalities of outcome, including by eliminating discriminatory laws, policies and practices and promoting appropriate legislation, policies and action in this regard

Full text of SDG#10	Targets	
	Short text	Full text
Reduce income inequality within and among countries	10.4 Adopt fiscal and social policies that promotes equality	Adopt policies, especially fiscal, wage and social protection policies, and progressively achieve greater equality
	10.5 Improved regulation of global financial markets and institutions	Improve the regulation and monitoring of global financial markets and institutions and strengthen the implementation of such regulations
	10.6 Enhanced representation for developing countries in financial institutions	Ensure enhanced representation and voice for developing countries in decision-making in global international economic and financial institutions in order to deliver more effective, credible, accountable and legitimate institutions
	10.7 Responsible and well-managed migration policies	Facilitate orderly, safe, regular and responsible migration and mobility of people, including through the implementation of planned and well-managed migration policies
	10.a Special and differential treatment for developing countries	Implement the principle of special and differential treatment for developing countries, in particular least developed countries, in accordance with World Trade Organization agreements
	10.b Encourage development assistance and investment in least developed countries	Encourage official development assistance and financial flows, including foreign direct investment, to States where the need is greatest, in particular least developed countries, African countries, small island developing States and landlocked developing countries, in accordance with their national plans and programs
	10.c Reduce transaction costs for migrant remittances	By 2030, reduce to less than 3 per cent the transaction costs of migrant remittances and eliminate remittance corridors with costs higher than 5 per cent

Sustainable development goal # 11 and its targets

Table 11 – SDG #11 and its targets

Full text of SDG#11	Targets	
	Short text	Full text
Make cities and human settlements inclusive, safe, resilient, and sustainable	11.1 Safe and affordable housing	By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums
	11.2 Affordable and sustainable transport systems	By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons
	11.3 Inclusive and sustainable urbanization	By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries
	11.4 Protect the world's cultural and natural heritage	Strengthen efforts to protect and safeguard the world's cultural and natural heritage
	11.5 Reduce the adverse effects of natural disasters	By 2030, significantly reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses relative to global gross domestic product caused by disasters, including water-related disasters, with a focus on protecting the poor and people in vulnerable situations
	11.6 Reduce the environmental impacts of cities	By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management
	11.7 Provide access to safe and inclusive green and public spaces	By 2030, provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and Persons With Disabilities
	11.a Strong national and regional development planning	Support positive economic, social and environmental links between urban, peri-urban and rural areas by strengthening national and regional development planning

Full text of SDG#11	Targets	
	Short text	Full text
Make cities and human settlements inclusive, safe, resilient, and sustainable	11.b Implement policies for inclusion, resource efficiency and disaster risk reduction	By 2020, substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, and develop and implement, in line with the Sendai Framework for Disaster risk reduction 2015–2030, holistic disaster risk management at all levels
	11.c Support least developed countries in sustainable and resilient building	Support least developed countries, including through financial and technical assistance, in building sustainable and resilient buildings using local materials

Sustainable development goal # 12 and its targets

Table 12 – SDG #12 and its targets

Full text of SDG#12	Targets	
	Short text	Full text
Ensure sustainable consumption and production patterns	12.1 Implement the 10-year sustainable consumption and production framework	Implement the 10-Year Framework of Programmes on Sustainable Consumption and Production Patterns, all countries taking action, with developed countries taking the lead, taking into account the development and capabilities of developing countries
	12.2 Sustainable management and use of natural resources	By 2030, achieve the sustainable management and efficient use of natural resources
	12.3 Halve global per capita food waste	By 2030, halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses
	12.4 Responsible management of chemicals and waste	By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment
	12.5 Substantially reduce waste generation	By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse

Full text of SDG#12	Targets	
	Short text	Full text
Ensure sustainable consumption and production patterns	12.6 Encourage companies to adopt sustainable practices and sustainability reporting	Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle
	12.7 Promote sustainable public procurement practices	Promote public procurement practices that are sustainable, in accordance with national policies and priorities
	12.8 Promote universal understanding of sustainable lifestyles	By 2030, ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature
	12.a Support developing countries' scientific and technological capacity for sustainable consumption and production	Support developing countries to strengthen their scientific and technological capacity to move towards more sustainable patterns of consumption and production
	12.b Develop and implement tools to monitor sustainable tourism	Develop and implement tools to monitor sustainable development impacts for sustainable tourism that creates jobs and promotes local culture and products
	12.c Remove market distortions that encourage wasteful consumption	Rationalize inefficient fossil-fuel subsidies that encourage wasteful consumption by removing market distortions in accordance with national circumstances, including restructuring taxation and phasing out those harmful subsidies where they exist, to reflect their environmental impacts, taking fully into account the specific needs and conditions of developing countries and minimizing the possible adverse impacts on their development in a manner that protects the poor and the affected communities

Sustainable development goal # 13 and its targets

Table 13 – SDG #13 and its targets

Full text of SDG#13	Targets	
	Short text	Full text
Take urgent action to combat climate change and its impacts by regulating emissions and promoting developments in renewable energy	13.1 Strengthen resilience and adaptive capacity to climate-related disasters	Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries
	13.2 Integrate climate change measures into policy and planning	Integrate climate change measures into national policies, strategies and planning
	13.3 Build knowledge and capacity to meet climate change	Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning
	13.a Implement the UN Framework Convention on Climate Change	Implement the commitment undertaken by developed-country parties to the United Nations Framework Convention on Climate Change to a goal of mobilizing jointly \$100 billion annually by 2020 from all sources to address the needs of developing countries in the context of meaningful mitigation actions and transparency on implementation and fully operationalize the Green Climate Fund through its capitalization as soon as possible
	13.b Promote mechanisms to raise capacity for planning and management	Promote mechanisms for raising capacity for effective climate change-related planning and management in least developed countries and small island developing States, including focusing on women, youth and local and marginalized communities acknowledging that the United Nations Framework Convention on Climate Change is the primary international, intergovernmental forum for negotiating the global response to climate change

Sustainable development goal # 14 and its targets

Table 14 – SDG #14 and its targets

Full text of SDG#14	Targets	
	Short text	Full text
Conserve and sustainably use the oceans, seas and marine resources for sustainable development	14.1 Reduce marine pollution	By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution
	14.2 Protect and restore ecosystems	By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans
	14.3 Reduce ocean acidification	Minimize and address the impacts of ocean acidification, including through enhanced scientific cooperation at all levels
	14.4 Sustainable fishing	By 2020, effectively regulate harvesting and end overfishing, illegal, unreported and unregulated fishing and destructive fishing practices and implement science-based management plans, in order to restore fish stocks in the shortest time feasible, at least to levels that can produce maximum sustainable yield as determined by their biological characteristics
	14.5 Conserve coastal and marine areas	By 2020, conserve at least 10 per cent of coastal and marine areas, consistent with national and international law and based on the best available scientific information
	14.6 End subsidies contributing to overfishing	By 2020, prohibit certain forms of fisheries subsidies which contribute to overcapacity and overfishing, eliminate subsidies that contribute to illegal, unreported and unregulated fishing and refrain from introducing new such subsidies, recognizing that appropriate and effective special and differential treatment for developing and least developed countries should be an integral part of the World Trade Organization fisheries subsidies negotiation
	14.7 Increase the economic benefits from sustainable use of marine resources	By 2030, increase the economic benefits to small island developing states and least developed countries from the sustainable use of marine resources, including through sustainable management of fisheries, aquaculture and tourism

Full text of SDG#14	Targets	
	Short text	Full text
Conserve and sustainably use the oceans, seas and marine resources for sustainable development	14.a Increase scientific knowledge, research and technology for ocean health	Increase scientific knowledge, develop research capacity and transfer marine technology, taking into account the Intergovernmental Oceanographic Commission Criteria and Guidelines on the Transfer of Marine Technology, in order to improve ocean health and to enhance the contribution of marine biodiversity to the development of developing countries, in particular small island developing States and least developed countries
	14.b Support small scale fishers	Provide access for small-scale artisanal fishers to marine resources and markets
	14.c Implement and enforce international sea law	Enhance the conservation and sustainable use of oceans and their resources by implementing international law as reflected in the United Nations Convention on the Law of the Sea, which provides the legal framework for the conservation and sustainable use of oceans and their resources, as recalled in paragraph 158 of "The future we want"

Sustainable development goal # 15 and its targets

Table 15 – SDG #15 and its targets

Full text of SDG#15	Targets	
	Short text	Full text
Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity	15.1 Conserve and restore terrestrial and freshwater ecosystems	By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements
	15.2 End deforestation and restore degraded forests	By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally
	15.3 End desertification and restore degraded land	By 2030, combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world

Full text of SDG#15	Targets	
	Short text	Full text
Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity	15.4 Ensure conservation of mountain ecosystems	By 2030, ensure the conservation of mountain ecosystems, including their biodiversity, in order to enhance their capacity to provide benefits that are essential for sustainable development
	15.5 Protect biodiversity and natural habitats	Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species
	15.6 Protect access to genetic resources and fair sharing of the benefits	Promote fair and equitable sharing of the benefits arising from the utilization of genetic resources and promote appropriate access to such resources, as internationally agreed
	15.7 Eliminate poaching and trafficking of protected species	Take urgent action to end poaching and trafficking of protected species of flora and fauna and address both demand and supply of illegal wildlife products
	15.8 Prevent invasive alien species on land and in water ecosystems	By 2020, introduce measures to prevent the introduction and significantly reduce the impact of invasive alien species on land and water ecosystems and control or eradicate the priority species
	15.9 Integrate ecosystem and biodiversity in governmental planning	By 2020, integrate ecosystem and biodiversity values into national and local planning, development processes, poverty reduction strategies and accounts
	15.a Increase financial resources to conserve and sustainably use ecosystem and biodiversity	Increase financial resources to conserve and sustainably use ecosystem and biodiversity
	15.b Finance and incentivize sustainable forest management	Mobilize significant resources from all sources and at all levels to finance sustainable forest management and provide adequate incentives to developing countries to advance such management, including for conservation and reforestation
	15.c Combat global poaching and trafficking	Enhance global support for efforts to combat poaching and trafficking of protected species, including by increasing the capacity of local communities to pursue sustainable livelihood opportunities

Sustainable development goal # 16 and its targets

Table 16 – SDG #16 and its targets

Full text of SDG#16	Targets	
	Short text	Full text
Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels	16.1 Reduce violence everywhere	Significantly reduce all forms of violence and related death rates everywhere
	16.2 Protect children from abuse, exploitation, trafficking and violence	End abuse, exploitation, trafficking and all forms of violence against and torture of children. It ensures that children are better served.
	16.3 Promote the rule of law and ensure equal access to justice	Promote the rule of law at the national and international levels and ensure equal access to justice for all
	16.4 Combat organized crime and illicit financial and arms flows	By 2030, significantly reduce illicit financial and arms flows, strengthen the recovery and return of stolen assets and combat all forms of organized crime
	16.5 Substantially reduce corruption and bribery	Substantially reduce corruption and bribery in all their forms
	16.6 Develop effective, accountable and transparent institutions	Develop effective, accountable and transparent institutions at all levels
	16.7 Ensure responsive, inclusive and representative decision-making	Ensure responsive, inclusive, participatory and representative decision-making at all levels
	16.8 Strengthen the participation in global governance	Broaden and strengthen the participation of developing countries in the institutions of global governance
	16.9 Provide universal legal identity	By 2030, provide legal identity for all, including birth registration
	16.10 Ensure public access to information and protect fundamental freedoms	Ensure public access to information and protect fundamental freedoms, in accordance with national legislation and international agreements
	16.a Strengthen national institutions to prevent violence and combat crime and terrorism	Strengthen relevant national institutions, including through international cooperation, for building capacity at all levels, in particular in developing countries, to prevent violence and combat terrorism and crime
16.b Promote and enforce non-discriminatory laws and policies	Promote and enforce non-discriminatory laws and policies for sustainable development	

Sustainable development goal # 17 and its targets

Table 17 – SDG #17 and its targets

Full text of SDG#17	Targets	
	Short text	Full text
Strengthen the means of implementation and revitalize the global partnership for sustainable development	17.1 Mobilize resources to improve domestic revenue collection	Mobilize resources to improve domestic revenue collection: Strengthen domestic resource mobilization, including through international support to developing countries, to improve domestic capacity for tax and other revenue collection
	17.2 Implement all development assistance commitments	Implement all development assistance commitments: Developed countries to implement fully their official development assistance commitments, including the commitment by many developed countries to achieve the target of 0.7 per cent of gross national income for official development assistance (oda/gni) to developing countries and 0.15 to 0.20 per cent of oda/gni to least developed countries; oda providers are encouraged to consider setting a target to provide at least 0.20 per cent of oda/gni to least developed countries
	17.3 Mobilize financial resources for developing countries	Mobilize financial resources for developing countries: Mobilize additional financial resources for developing countries from multiple sources
	17.4 Assist developing countries in attaining debt sustainability	Assist developing countries in attaining debt sustainability: Assist developing countries in attaining long-term debt sustainability through coordinated policies aimed at fostering debt financing, debt relief and debt restructuring, as appropriate, and address the external debt of highly indebted poor countries to reduce debt distress
	17.5 Invest in least-developed countries	Invest in least developed countries: Adopt and implement investment promotion regimes for least developed countries
	17.6 Knowledge sharing and cooperation for access to science, technology and innovation	Knowledge sharing and cooperation for access to science, technology and innovation: Enhance north-south, south-south and triangular regional and international cooperation on and access to science, technology and innovation and enhance knowledge sharing on mutually agreed terms, including through improved coordination among existing mechanisms, in particular at the united nations level, and through a global technology facilitation mechanism

Full text of SDG#17	Targets	
	Short text	Full text
Strengthen the means of implementation and revitalize the global partnership for sustainable development	17.7 Promote sustainable technologies to developing countries	Promote sustainable technologies to developing countries: Promote the development, transfer, dissemination and diffusion of environmentally sound technologies to developing countries on favorable terms, including on concessional and preferential terms, as mutually agreed
	17.8 Strengthen the science, technology and innovation capacity for least-developed countries	Strengthen the science, technology and innovation capacity for least developed countries: Fully operationalize the technology bank and science, technology and innovation capacity-building mechanism for least developed countries by 2017 and enhance the use of enabling technology, in particular information and communications technology
	17.9 Enhanced SDG capacity in developing countries	Enhance SDG capacity in developing countries: Enhance international support for implementing effective and targeted capacity-building in developing countries to support national plans to implement all the sustainable development goals, including through north-south, south-south and triangular cooperation
	17.10 Promote a universal trading system under the WTO	Promote a universal trading system under the WTO: Promote a universal, rules-based, open, non-discriminatory and equitable multilateral trading system under the world trade organization, including through the conclusion of negotiations under its Doha development agenda
	17.11 Increase the exports of developing countries	Increase the exports of developing countries: Significantly increase the exports of developing countries, in particular with a view to doubling the least developed countries' share of global exports by 2020
	17.12 Remove trade barriers for least-developed countries	Remove trade barriers for least developed countries: Realize timely implementation of duty-free and quota-free market access on a lasting basis for all least developed countries, consistent with world trade organization decisions, including by ensuring that preferential rules of origin applicable to imports from least developed countries are transparent and simple, and contribute to facilitating market access
	17.13 Enhance global macroeconomic stability	Enhance global macroeconomic stability: Enhance global macroeconomic stability, including through policy coordination and policy coherence
	17.14 Enhance policy coherence for sustainable development	Enhance policy coherence for sustainable development Enhance policy coherence for sustainable development

Full text of SDG#17	Targets	
	Short text	Full text
Strengthen the means of implementation and revitalize the global partnership for sustainable development	17.15 Respect national leadership to implement policies for the sustainable development goals	Respect national leadership to implement policies for the sustainable development goals: Respect each country's policy space and leadership to establish and implement policies for poverty eradication and sustainable development
	17.16 Enhance the global partnership for sustainable development	Enhance the global partnership for sustainable development Enhance the global partnership for sustainable development, complemented by multi-stakeholder partnerships that mobilize and share knowledge, expertise, technology and financial resources, to support the achievement of the sustainable development goals in all countries, in particular developing countries
	17.17 Encourage effective partnerships	Encourage effective partnerships: Encourage and promote effective public, public-private and civil society partnerships, building on the experience and resourcing strategies of partnerships
	17.18 Enhance availability of reliable data	Enhance availability of reliable data: By 2020, enhance capacity-building support to developing countries, including for least developed countries and small island developing states, to increase significantly the availability of high-quality, timely and reliable data disaggregated by income, gender, age, race, ethnicity, migratory status, disability, geographic location and other characteristics relevant in national contexts
	17.19 Further develop measurements of progress	Further develop measurements of progress: By 2030, build on existing initiatives to develop measurements of progress on sustainable development that complement gross domestic product, and support statistical capacity-building in developing countries

Links between SDG's are shown at fig.1 and can help you better understand meaning of each SDG and it's target.

2. Task for practice work

Choose one grant or startup project (table 18) and try to find out which of SDG and target of it (tab.1-17, fig.1) correspondence to the main project's idea. You also can make it for your own project (start with it description). Than have a discussion in your group about correspondence, try to criticize and defend each other choice.

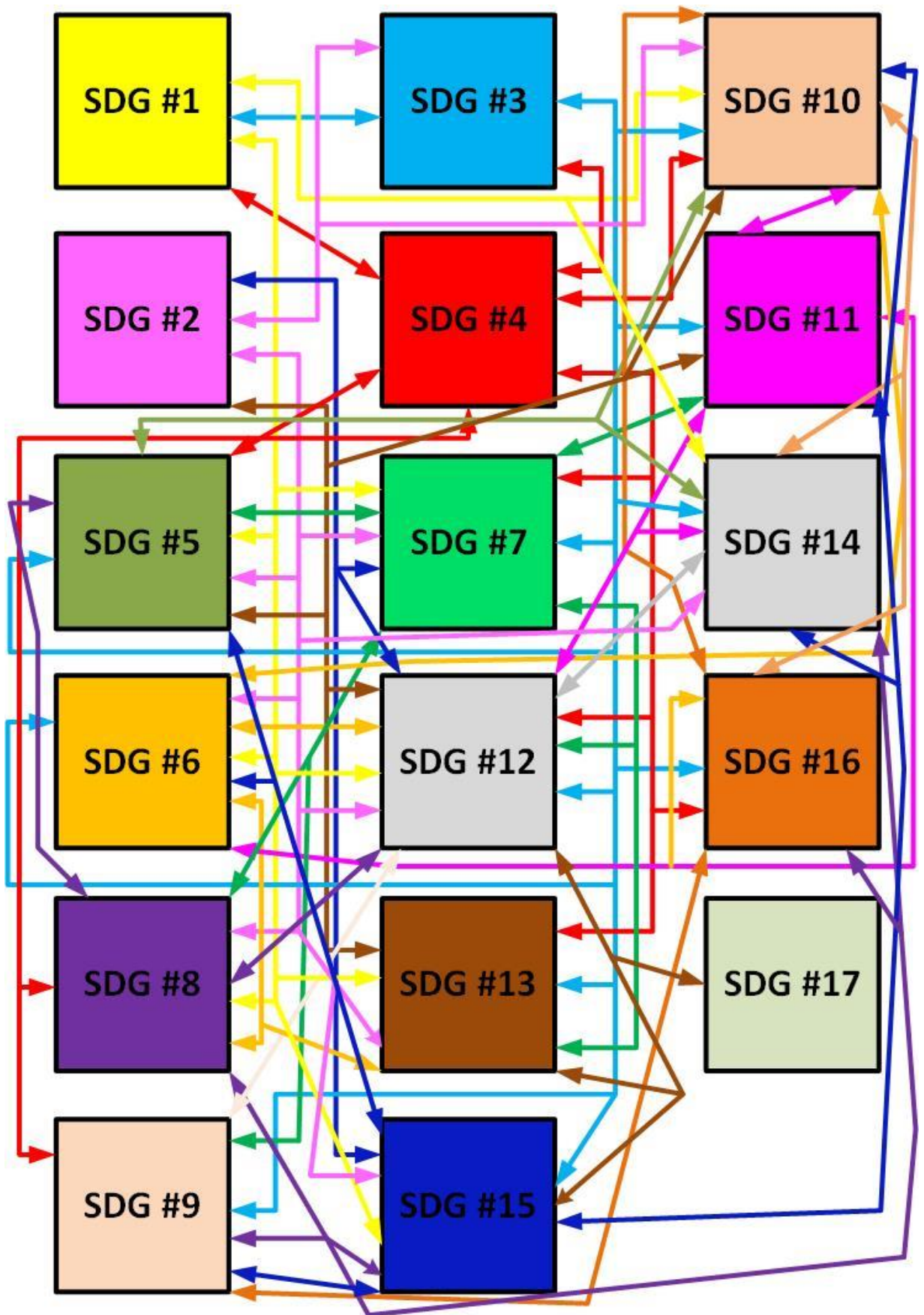


Figure 1 - Links between SDG's

Table 18 – Grant and startup project’s description

#	Description	Project’s type
1	Information project for large oil production companies managers "Extract oil - take care of future generations"	grant
2	Creation of informational materials for small cities residents adjacent to large oil pipelines with the aim of informing them about the environmental consequences of oil theft using self-made oil pipelines	
3	Setting up stationary air quality monitoring stations near the refinery factory	
4	Educational project for schoolchildren "What we receive from oil"	
5	Energy-efficient houses from natural materials for families left without a home due to a natural disaster, fire or military operations	
6	The project for landscaping the territories around abandoned coal mine or oil (gas) extraction areas	
7	An application for mobile devices to assess the environmental safety of gas station locations in some district	
8	Creating posters about the dangers of rivers and lakes oil pollution	
9	Creation an interactive map for plotting the coordinates of the petroleum products leakage	
10	Creation of smart cheap compact devices for quality drinking water analyzing for citizens	startup
11	Designing of biodegradable packaging for coffee “to go”	
12	Mobile application for assessing the environmental safety of the territory	
13	Automated program designing for oil or gas extraction chosen method assessing the environmental friendliness	
14	Automated complex produced oil quality assessment	
15	A new energy-efficient method of oil extraction	

Навчальне видання

Методичні вказівки

до практичного заняття

на тему

«Відповідність грантових та старт-ап заявок цілям сталого розвитку»

з курсів «Екологічні засади сталого розвитку країни», «Міжнародна співпраця та грантрайтинг в екології»

для студентів

спеціальності 101 «Екологія» усіх форм навчання

(англійською мовою)

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