

**KYIV NATIONAL UNIVERSITY OF CONSTRUCTION AND
ARCHITECTURE**

**Urban and Spatial Development
Faculty Urban Economy Department**

Planning for an Ecological Civilization

This presentation explores the concept of ecological civilization construction, outlining key principles and strategies for building a sustainable and harmonious future.

**By student of the group 192 UPE Ge Yuxin
Specialty: 192 Construction and Civil Engineering
Educational program: Urban planning and economy**



The Concept of Ecological Civilization

Beyond Anthropocentrism

Ecological civilization emphasizes a shift from anthropocentric thinking, which places humans at the center of the universe, to an eco-centric worldview that recognizes the intrinsic value of all living beings and the interconnectedness of all natural systems.

Harmony with Nature

It promotes a harmonious relationship between humans and nature, seeking to restore ecological balance and ensure the well-being of both present and future generations. This approach aims to create a society where human activities are in balance with natural processes.



The Importance of Environmental Protection

Preserving Ecosystem Services

Environmental protection is crucial for preserving vital ecosystem services, such as clean air and water, biodiversity, and climate regulation, which are essential for human survival and well-being.

Mitigating Climate Change

Protecting the environment is essential for mitigating climate change, which poses a significant threat to the planet's health and stability. Actions to reduce greenhouse gas emissions and adapt to climate change are crucial for a sustainable future.

Promoting Health and Well-being

A healthy environment is essential for human health and well-being. Protecting natural resources, reducing pollution, and preserving biodiversity promote a cleaner and healthier environment for all.

Sustainable Resource Management

Efficient Resource Utilization

Sustainable resource management emphasizes efficient and responsible utilization of natural resources, minimizing waste and ensuring that resources are available for future generations. It promotes the development of sustainable practices in agriculture, forestry, and other sectors.

Conservation and Restoration

It involves conserving existing natural resources and restoring damaged ecosystems. This includes protecting forests, conserving water resources, and rehabilitating degraded lands, ensuring the long-term health of natural systems.

Circular Economy Approach

Implementing circular economy principles, such as waste reduction, recycling, and reuse, promotes a more sustainable approach to resource management, minimizing environmental impact and maximizing resource efficiency.





Renewable Energy Adoption



Solar Energy

Harnessing solar energy through photovoltaic panels and solar thermal systems is a key component of transitioning to a sustainable energy future. Solar energy offers a clean and abundant source of power.



Wind Energy

Wind energy, generated through wind turbines, offers another clean and renewable energy source. Wind farms can contribute significantly to reducing reliance on fossil fuels and promoting a cleaner environment.



Hydropower

Hydropower, generated through dams and other hydroelectric facilities, is a reliable and sustainable energy source, particularly in regions with abundant water resources. It can contribute to a cleaner and more resilient energy system.



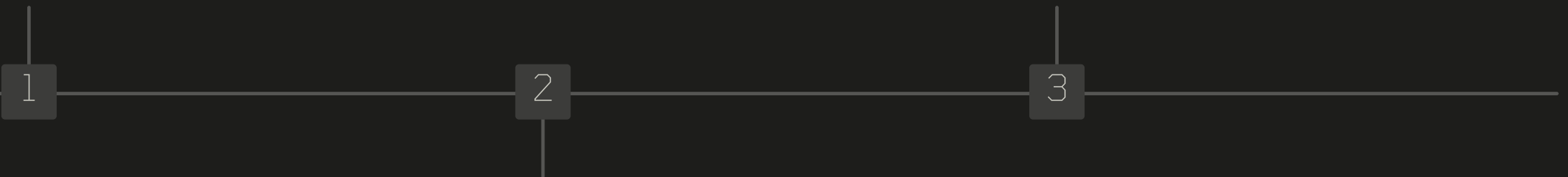
Green Infrastructure Development

Urban Greening

Green infrastructure development, including urban greening, promotes the integration of natural elements, such as parks, green roofs, and urban forests, into urban areas. These elements provide numerous benefits, including improved air quality, reduced heat island effect, and enhanced biodiversity.

Sustainable Building Design

Sustainable building design emphasizes energy efficiency, water conservation, and the use of eco-friendly materials. It promotes the construction of buildings that minimize their environmental footprint and enhance occupant well-being.



Sustainable Transportation

Developing green transportation systems, such as electric vehicles, bike lanes, and public transit, promotes a cleaner and more efficient approach to mobility, reducing reliance on private cars and contributing to a healthier environment.



Biodiversity Conservation

1

Protecting Ecosystems

Protecting habitats, such as forests, wetlands, and marine ecosystems, is crucial for preserving biodiversity. It involves establishing protected areas, reducing pollution, and promoting sustainable land use practices.

2

Species Conservation

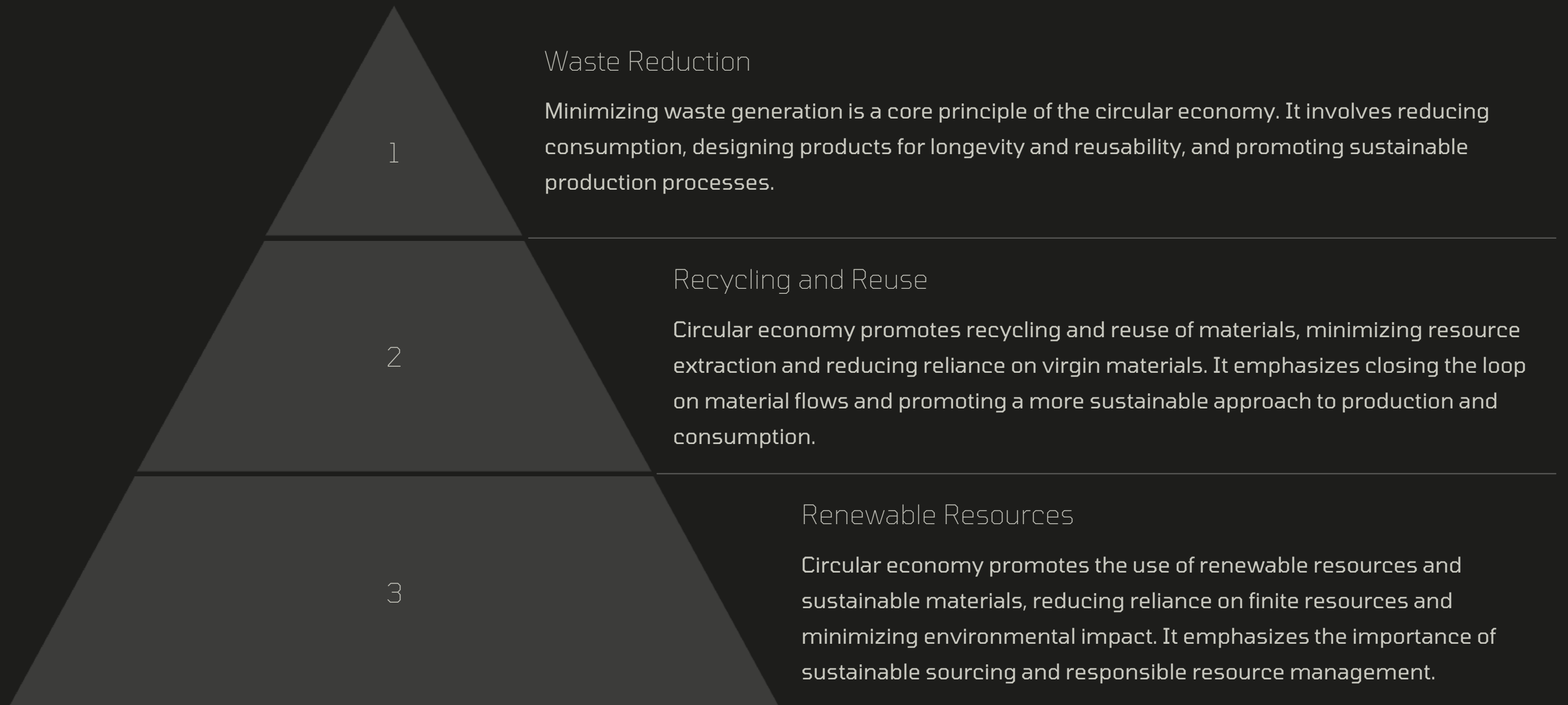
Conservation efforts should focus on protecting endangered and threatened species, through habitat restoration, population management, and combating illegal wildlife trade. It emphasizes the importance of preserving genetic diversity for the long-term health of ecosystems.

3

Restoring Degraded Habitats

Restoring degraded ecosystems, such as wetlands, forests, and grasslands, plays a vital role in biodiversity conservation. It involves restoring natural habitats and promoting ecological regeneration, leading to a healthier and more resilient environment.

Circular Economy Principles



Citizen Engagement and Education

1

Empowerment and Action

Engaging citizens in environmental issues is crucial for building an ecological civilization. It involves empowering individuals to take action and become active participants in creating a sustainable future.

2

Education and Awareness

Education and awareness-raising programs play a vital role in fostering environmental stewardship. It involves promoting understanding of environmental issues, sustainable practices, and the importance of ecological balance.

3

Community-Based Initiatives

Encouraging community-based initiatives, such as urban gardening, waste reduction programs, and renewable energy projects, empowers citizens to take direct action and contribute to a more sustainable society.

Policy and Regulatory Frameworks

1

Environmental Laws and Regulations

Strong environmental laws and regulations are essential for protecting natural resources, reducing pollution, and promoting sustainable practices. These regulations provide a framework for responsible environmental stewardship.

2

Incentives and Subsidies

Government incentives and subsidies can encourage businesses and individuals to adopt sustainable practices, such as renewable energy technologies, energy efficiency measures, and waste reduction programs. These incentives promote innovation and accelerate the transition to a sustainable economy.

3

International Cooperation

International cooperation and collaboration are crucial for addressing global environmental challenges. It involves sharing knowledge, promoting technology transfer, and implementing coordinated policies to address issues such as climate change, biodiversity loss, and pollution.

