

## A knowledge Alliance in Eco-Innovation Entrepreneurship to Boost SMEs Competitiveness"

Final Conference Friday, February 12, 2021

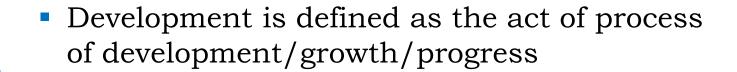
Green Businesses – Economical and Environmental Benefits: The case study of North Macedonia



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- Economic development was researched intensively in the past 2 centuries, starting with Ferdinando Galiani in his work 'Della Moneta' in 1751 and later on Adam Smith in 1877 in his book 'The wealth of nations'
- Sustainable development was a topic of interest only for the researchers and academics until 1980s
- It was featured in the historical Brundtland Report, 'Our Common Future: Report of the World Commission on Environment and Development' published by the UN World Commission on Environment and Development in 1987
- Since then is became a global concern

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- However, what is price we are paying for such a narrow definition of development?
- That is why we need to extend the definition and redirect towards sustainable development
- A development that meets the need of the present without compromising the ability of future generations to meet their needs
- Not just by 2050, most of our development strategies are focusing on a period up until 2030, 2040 with vision to 2050, but what after this period?!

- WHO calls upon the whole world to jointly act and fight the Corona virus
- We all act as directed because we are left with no choices
- Business slow down or close down

"We need to turn the recovery into a real opportunity to do things right for the future." – <u>UN Secretary-General</u>

<u>António Guterres</u>

• The well-being of the environment, the economies and the people as one symbiotic system and intensify the cooperation on a global scale to ensure sustainable development.

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# SDG are crucial for greener living, stronger economies

The Sustainable Development Goals are vital for a recovery that leads to greener, more inclusive economies, and stronger, more resilient societies. Click on each goal to read more.







as well as more resilient societies as a whole.





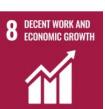


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## Greening the Businesses & Jobs

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So, what is the essence of green businesses or a green jobs

- Will I know it when I see it?
- Does a green business represent a process or an end result?
- And, is green job easier said that done?
- Is sustainable development limited to rich and advanced economies?

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- Greening the economy = Greening businesses + greening jobs
- There is still no consensus among the researchers what these two categories exactly represent, but
- It is considered that they refer to improving, protecting, maintaining and preserving the environment by means of application of simple behavioral issues to taking advantage of the new and emerging technologies that in any way preserve the air, water and soil and in any way decrease the eco-footprint of the companies and individuals
- The concept of circular economy, which involves reusing, repairing or recycling, increasing sustainable manufacturing and consumption as well as reducing waste and saving energy will also create green jobs/businesses

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- In the United Nations Environment Programme (UNEP) green jobs are defined as "positions in agriculture, manufacturing, R&D, administrative, and service activities aimed at substantially preserving or restoring environmental quality".
- According to the International Labour Organization (ILO), these type of jobs:
- Increase efficient consumption of energy and raw materials.
- Limit greenhouse gas emissions.
- Minimise waste and contamination.
- Protect and restores ecosystems.
- Contribute to adaptation to climate change.
- Positively reflect on the global economy.
- The growth in future employment will be insufficient to satisfy the growth in the workforce in emerging and developing countries..."changes in production and use of energy to achieve the 2 °C target may lead to the creation of around 18 million jobs in the world economy".

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## Green Businesses – Green Jobs



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Circular Economy and decarbonization will have great impact on the businesses in the following sectors:

#### Energy

According to the International Renewable Energies Agency (IRENA), renewable energies created more than 500,000 new jobs in the world in 2017 — an increase of 5.3% with respect to 2016 — and it is estimated that the sector now employs more than 10 million people. Jobs that require advanced qualifications in the renewable energy sector, such as senior engineers in thermosolar plants, are the best paid green jobs in the world.

#### **Industry**

The industries could spend more on R&D and/or implement new technologies to become more environmentally friendly. For example, introduce recycling practices. Eco-innovation, technology transfer and know-how exchange.

#### **Buildings/Construction**

The buildings are responsible for the 30-40 % of primary energy use, GHG and waste generation on the global scale. Green buildings, retrofitting, lighting, energy saving appliances and equipment.

#### Agriculture

According to the Research Institute of Organic Agriculture (FiBL), the organic agriculture market is still growing around the world, in many cases in double digit figures. In the United States, organic food sales increased by 6.4% in 2017, reaching 43,700 million euros. In the meantime, Europe experienced growth of 10.5%, reaching 37,300 million euros.

#### Design

European policies require increasingly high recycling rates and establish ever-stricter ecodesign criteria. This fact, added to many consumer' environmental awareness, have made ecodesign — from packaging to building roofs and myriad products — a booming source of jobs.

#### **Tourism**

In a society increasingly concerned with the health of the planet, ecotourism, outdoor and adventure tourism.

#### Transport

This sector is responsible for more than 30% of CO2 emissions in the European Union (EU), 72% of which come from road transport. Many countries have already adopted measures to drastically reduce transport emissions. The EU will cut these by 60% compared to 1990 levels for 2050, creating job opportunities in the electric vehicles sector, public transport and electrified railway good haulage.

- The green business/jobs are emerging
- There is current support by the UNDP, EBRD, EIB, KfW, WB, USAID and the EU
- APP Voucher and mentoring systems
- Sustainable loaning helps business become more green
- Support in implementation of Energy Management ISO 50001 for businesses
- Support in implementation of CSR practices
- Support to VET education in development of new job profiles/ green jobs (BIM, Drone Operators, 3D concrete printing)
- Support by tax exemptions or reduced customs taxes for some industry raw materials
- Chambers of commerce provides training and lobbying
- Support to entrepreneurs in terms of environmental economics and circular economy implementation

- The participants in the program developed BM that addressed an eco problem
- Sectors involved: transportation, sales, waste management, hospitality industry, well-being and healthy living, organic food, apparel
- Younger population is evidently aware of the existing environmental problems but also face the pressure of the consumerism

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## ROSICAMRSIK

Established in 2009, the brand produces sustainable and authentic fashion collections, based on fair trade, on-demand and slow fashion with local ecofriendly production.



## Intebako – RES – emerging sector



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Revolutionized the way energy is delivered by giving customers a cleaner, more affordable alternative





## **Investment:**

Producer of polyethylene pipes:

- Spiral machine for extrusion
- Materials and energy saving
- Investment: €935,060



### Results:

- ► Annual savings: €314,836
- ► Energy saving rate: 42%
- RoI: 2.93 год.
- Reduced  $CO_2$ : 1,517 t/y.
- Other benefits:
  - Increased capacity and production
  - Less waste
  - Reduced management and maintenance costs

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## **Investment:**

- ▶ 12 sets of UV lams in the printing machines with embedded cooling system
- Investment: €78,000



### Results:

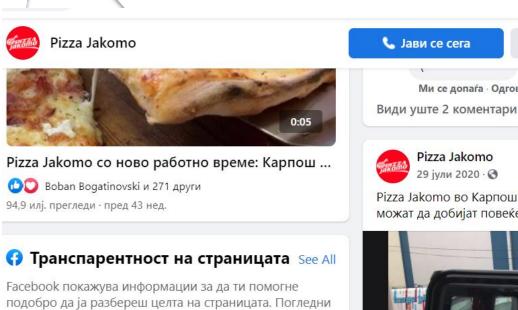
- Annual savings: €24,560
- ▶ Energy saving rate: 71%
- RoI: 3.19 год.
- Reduced  $CO_2$ : 164 t/y.
- Other benefits:
  - Better quality
  - Improved production process

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Порака

## Electric Vehicles for delivery



ги активностите на луѓето што управуваат со страницата и објавуваат содржина.



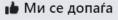
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#### Слични страници



Domino's Pizza Maced...

Ha Sonja Nikolovska му/й се... Пицерија





Pizza Pempele





📞 Јави се сега

Pizza Jakomo во Карпош има потреба од Доставувачи. Сите заинтересирани можат да добијат повеќе информации во инбокс.

Ми се допаѓа



## We are far from the perfect

but, the process of greening has started

- SDG are recognized by the Governmental bodies and inputs are made in some strategic documents
- The pioneers are already established, now we need to educate the rest of the businesses
- There is need to start educating the youth towards environmental sustainability
- And, finally there is a need for joint and organized activities, not just one time projects!

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...start today with greening your business

...download the document or pic/s only one time, and use internal servers

... its saves energy

If we divide the 1.7 billion tonnes of GHG emissions estimated to be produced in the manufacture and running of digital technologies between all internet users around the world, it means each of us is responsible for 400g (14oz) of carbon dioxide a year. The carbon footprint of our gadgets, the internet and the systems supporting them account for about 3.7% of GHG emissions. It is similar to the amount produced by the airline industry. And these emissions are predicted to double by 2025.'