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GREEN TECHNOLOGIES AND SUSTAINABILITY IN THE ARAB REGION

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Introduction. The main aim of this article is to introduce the characteristic of green technology and its goals and to highlight a number of green technologies, innovations and practices that could be adopted and applied easily throughout the Arab region.

Green Technology.

Overview on Green Technology in Arab Region the change in economic conditions in the seventies of the last century and the accompanying global crises, made the industrialized countries reconsider restructuring their economies in conjunction with the arrival of the world to the stage of the technological revolution that had an impact that was realistically exploited to break the barrier of dependence on fossil fuels (oil, coal, gas), which is a fundamental basis in the economy of many countries [2]. However, neglecting the environmental aspect led to environmental pollution represented by climate changes, global warming and the expansion of the ozone layer, as well as drought and desertification, which intensified with the increased exploitation of those resources and population

pressures, until the continuation of economic growth became a challenge to human existence. Since the launch of the Earth Summit “Rio de Janeiro 1992” and the subsequent summits, international organizations have called for the adoption of a new development pattern whose presence in nature is automatically and periodically linked to the economic, environmental and social aspects [3]. The United Nations Program defines a green economy as an economy that improves human well-being and social equity while at the same time significantly reducing environmental risks. At the field level, it can be defined as an economy in which growth in income and employment is directed by investments in the public and private sectors that will lead to enhancing the efficiency of resource use, reducing carbon emissions, waste and pollution, and preventing the loss of biodiversity and ecosystem degradation. This investment drives the growing demand for goods and services. Green economy and technological innovations by correcting tax public policies to ensure that prices reflect the costs on the environment. As the country follows the green economy policy, the results appear on the country’s economy in a scientific way, not just its impact on goods. This system provides aid and grants to poor countries in order to advance education, health and infrastructure. Thus, the goal of justice and equality in development is achieved. [4].

Some Arab countries have tended to strengthen their position to shift towards a green economy in the context of their reform programs. A report was issued by the International Labor Organization in May 2018 that 24 million job opportunities will be created by 2030 if green policies are followed. So, the transition from the traditional economy to the green economy has become the slogan of the next stage for Several Arab countries, and this was translated at the level of policies and procedures, bearing in mind that there are pressing challenges related to providing a sound regulatory framework after updating environmental laws and policies

and long-term funding sources in light of the outbreak of the Corona epidemic and the decline in oil prices.

Spreading green technology: The dissemination of green technology towards developing countries is necessary for their rapid transformation to these technology without the need to go through its stages of development. However, there are some who believes that technology and technical assistance is rarely an appropriate solution to developing facilities of developed countries, where technology transfer can take place well between the advanced industrial countries and the developed countries advancing in industry which has the self-capabilities to maximize the benefit of imported technology. While most developing countries lack these capabilities, in addition to their lack of knowledge to apply technology management. Thus, entering into partnerships and collaborative arrangements may contribute to providing companies in developing countries with the ability to benefit from technology transferred to them in a better way. The diffusion of technology involves more than just physical transfer, as it extends to skills, consultancy, knowledge and services, and relies on the availability of local capacities and skills and obtaining the necessary information from suppliers or users. The effectiveness of dissemination of green technology programs increases if it targets certain industrial sectors or specific environmental problems in the shadow of finding and creating links and communication networks between universities, research centers, individual companies and national bodies concerning in policy making. [1]

Wipo Green: The Sustainable Technology Market that can benefit Arab region, established by WIPO in 2013, the WIPO Green platform supports global efforts to combat climate change by connecting key actors in green innovation through its database and network. The platform aims to stimulate and spread innovation in this field, and to contribute to the efforts of developing countries in facing global challenges posed by climate, food security and the environment. WIPO GREEN is guided by a strategic plan that lays out a roadmap for supporting technology exchange that will accelerate the adaptation, adoption and diffusion of

green technology solutions, by connecting technology providers and researchers. Currently has over 3,500 entries of technology, needs and experts, and over 100 partners including startups and considered from the largest 500 companies in the world (Fortune 500). There are more than 1,400 users from all over the world, and the platform has so far seen over 640 connections that may lead to potential collaborations. It offers a range of technologies from prototypes to marketable products available for licensing, collaboration, joint ventures and sale. It also contains a list of needs identified by companies, foundations and NGOs seeking technologies to address environmental or climate change problems. It also manages a number of so-called acceleration projects that focus on a specific geographic region or technology area. These projects provide service providers and researchers with critical communication opportunities that can lead to the transfer or diffusion of green technology. For example, an ongoing project in Latin America focuses on exploring local challenges, identifying potential green technology opportunities and building relationships in climate-smart agriculture. It publishes an annual review of the activities undertaken and the achievements made. It has also hosted exhibitions of green inventions, such as the one dedicated to the most important technologies focused on Africa, which was held during the twenty-second session of the Conference of the Parties (COP22) in Marrakesh, in November 2016. Most recently, at COP25, WIPO GREEN drew attention to the role of innovation and technology transfer in helping to spread climate-smart agricultural technologies in Argentina, Brazil and Chile. [9]

Applicable Examples affecting sustainability and environment in Arab region Liquid Nano Clay (*LNC*) is a new technology whereby desert and dry land sandy soils are turned into fertile ones. LNC coats sand particles mechanically with a clay layer, thereby turning desert sands into a sponge like basin that better retains moisture and nutrients. Its impact lasts for around 5 years, and it could help save up to 50%-60% of irrigation water.[8]

Integrated production systems can generate multiple products and several sources of income in rural communities. The schemes involve combination of

crops, domesticated animals and aquatic species. They utilize low quality land and water resources including, for example, saline groundwater, drainage water or salt affected lands. The system produces positive interactions as: (i) animal manure is used to fertilize crops and ponds; (ii) crop by-products are used to feed animals and fish (iii) pond sediments are used as fertilizers and (iv) aquaculture water is used for irrigation.[6]

Vermicomposting or worm composting. It transforms kitchen scraps and green wastes into rich dark soil with an earthy aroma. The technique is made of mainly pure worm castings and known to be very beneficial. It is rich in nutrients and is loaded with microorganisms that compose and maintain healthy soil. It is used as top or side dressing for demanding plants. When the vermicompost is mixed with regular compost, it adds a boost to the garden's soil. Worms feed on carbon emitting microbes in the soil, thus decreasing the amount of emissions to the atmosphere. Vermicomposting is not expensive. The cost consists of the cost of the worms and bin. A bin is ready for harvesting in 8-12 weeks of time[7].

Conclusion

Therefore, green technology should be efficient, practical, cost effective and free from pollution. The sustainability factor should be looked at the ability of the agricultural land to maintain acceptable levels of production over a long period of time, without degrading the environment[2]. Although the green technology market is relatively young, it has gained a great deal of investors' interest due to the increased awareness of the effects of climate change and the depletion of natural resources.[5]

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THE SIGNIFICANCE OF E-COMMERCE IN BUILDING BETTER CUSTOMER RELATIONSHIP

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Introduction. This article discusses the significance of e-commerce towards customers and consumers, e-commerce means using the internet for business trading procedures.

E-commerce market

In old days, life was more difficult, consuming daily needs wasn't easy at all, and it is required a lot of effort, status now has completely changed from what it was, as many of the different electronic developments began to dominate and