

Effects of Climate Changes on Future Architecture and the Contribution of the Developing Countries to Limit and Avoid Harms

"The Arab World – A Case Study"

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Abstract:

Climate change is one of the challenges that threatens the future of humankind at the turn of the century, foretelling of catastrophic consequences unless we start to correct the course. The construction industry is one of the causes of the problem. Therefore, it is imperative for architects to accelerate towards offering architecture capable of facing climate change, foremost of which is the depletion of natural resources through existing architecture patterns that do not put reuse as a necessity to confront climate change.

Therefore, the research paper comes as a serious attempt to lay the foundations of architecture capable of facing the challenges of the future, and limits the repercussions of the environmental degradation, which is the environmentally friendly construction industry, the most important reasons for it. These recent studies show that the current construction industry causes 33% of carbon dioxide emissions, to 17% of fresh water, 25% of wood is consumed, and 40% of energy is consumed. In addition to 50% of the amount of natural materials, which makes creating a compatible architecture extremely important.

And the countries that bear most of the consequences of climate change. Although the Arab world's contribution does not exceed 5% of the gases, the Arab world bears the costs of environmental degradation at 4% to 9% of the GDP. Other than that the Arab region is one of the regions of the world most affected by climate change harms, because of its coastline. This requires changes in the architecture of the future by establishing in creating designs that are more adaptive to its environment as well as rationalizing resource consumption and recycling with the need to evaluate the manufacturing phase of building materials as a prerequisite for assessing the sustainability of buildings. Along with a bunch of political decisions obliged by countries that can reduce climate change. Key words: Climate changes – environmental deterioration – future architecture – natural resources

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