# GLOBAL WARMING

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## What is global warming ?

It is gradual increase in overall temperature of the earth's atmosphere generally attributed to greenhouse effect caused by increased level of carbon dioxide,CFCs and other pollutants.



## How buildings and construction effects the global warming



# Construction industry cause global warming

Construction industry is also responsible for causing global warming. Activities related to buildings are responsible for 35 to 45 % of CO2 releases into atmosphere.

Therefore construction of building emits CO2, not a building itself. Energy required for a building to operate is mainly based on heating and cooling purposes. In united states a 30% of carbon emmision is cause by built environment.

#### Energy usage by building

During a life time of building, it require a lot of energy in order to operate it and majority of buildings in whole world are using electricity that is source of coal power plant. For eg. The building produce high heat that radiates outside into the air and most buildings does not structured for such high temperature. In order to solve the problem air conditioning has been used. The usage of air conditioning will increase the energy consumption and emission of CO2.

### **Embodied Energy**

It is that energy which is used to produce a building material such as cement steel aluminium and other material. Embodied energy can be meant by non-renewable energy used in acquisition of raw materials, processing, manufacturing, transportation to site and construction.

### Deforestation

As for construct a building we need land. So to fulfill that demand we continuously cut the trees for construction and that also result in increase the temperature of atmosphere which result in global warming



#### a alamy stock photo

JEHG7E www.idany.com



#### Effects of global warming on buildings

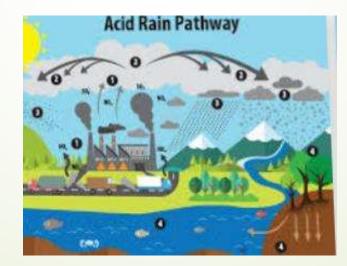
Due to global warming there was more severe weather which result in more stroms, floods in some areas with droughts in others. These disaster result in damage the buildings and other major problems.





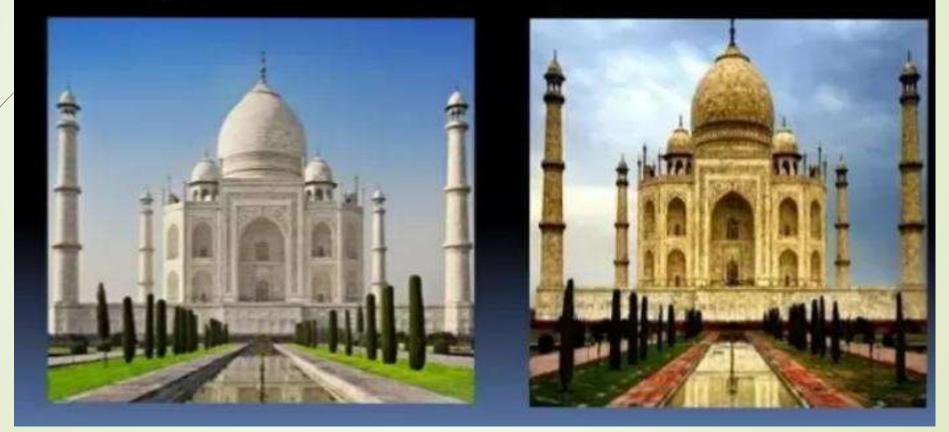


Due to change in temperature and emission of gases there was also a chemical reaction occurs which result in acid rain and it effects on infrastructure and result in damage of buildings



#### Effect of acid rain

Taj Mahal color due to acid rain. Acid rain reacted with the marble (calcium carbonate) of Taj Mahal. This caused damage to this wonderful structure, ...



#### How we can control global warming

In order to reduce carbon emission, consticting a building with energy efficiency or low carbon emission is a trend in nowday construction industry. The design and equipment used by building must be energy efficient.

### By making more vertical buildings

As there was shortage of land and to decrease deforestation we generally construct more vertical buildings which requires less land and by this deforestation also minimise.





