

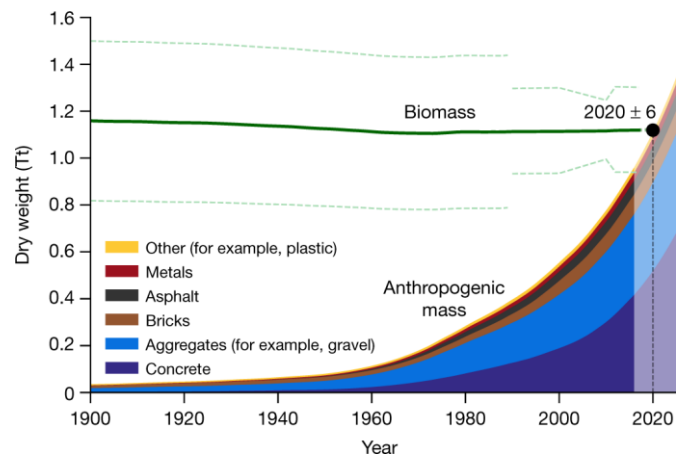
## FAQ's Sustainability and Geosynthetics.

### 1: How can Geosynthetics support Sustainability?

In comparison with classic constructions, Geosynthetics are a better solution as they have the following environmental advantages:

- using geosynthetics reduces CO2 Emissions
- using geosynthetics reduces Energy Demand
- using geosynthetics reduces other Emissions

Using Geosynthetics also preserves natural resources like sand or gravel as well as natural resource such as fresh water. With the anthropogenic mass overtaking the biomass (see graph) the natural resources must be protected.



### 2: How can Geosynthetics support the Global Goals of the UN for sustainable development?

The UN has defined several “sustainable development goals/SDGs” where some of them, depending on the application, are clearly supported by geosynthetics with:

Environmental aspects

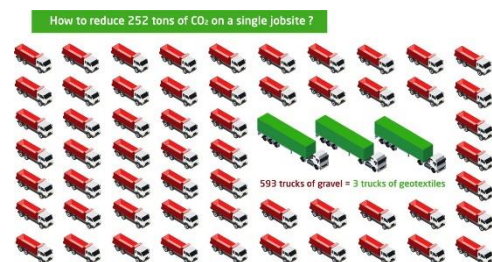
Economic aspects



#### 2a: Environmental Aspects:

- Life Cycle Assessments: LCA's have proven, for 4 different application areas (filter layer, foundation stabilisation, landfill construction and soil retaining wall) that geosynthetics have a 75% lower environmental impact as compared with conservative materials (such as concrete, cement, lime or gravel).
- The use of geosynthetics preserve the use of natural resources such as:
  - o The saving of quarrying sand, concrete aggregate, drainage stone
  - o Preventing the use fresh water for installation of clay
  - o Avoiding the milling of lime or cement into the ground
  - o Significantly reduces the amount of traffic

#### GEOSYNTHETICS CONTRIBUTE TO PREVENTING WATER SCARCITY



## 2b: Economic Aspects:

With the use of Geosynthetics you can effectively reduce the overall cost of a project. Studies have proven that:

- The use of geosynthetics result in a significant reduction in construction costs
- The very high durability and life-time of Geosynthetics increases the service life of a construction and reduces the maintenance cost of constructions

## Conclusion:

It can therefore be concluded that Geosynthetics combine benefits from economic, technological and ecological perspective.

Geosynthetics clearly contribute to achieving the goals of the United Nation Sustainable Development Goals (UNSDGs), the European Green Deal, the EU Circular Economy Action Plan, and the Strategy for a Sustainable Built Environment.