



22-24
September 2020
Online exhibition

**EUROPEAN
RESEARCH &
INNOVATION
DAYS**



VIRTUAL
EVENT

22 → 24
SEPTEMBER

20
20



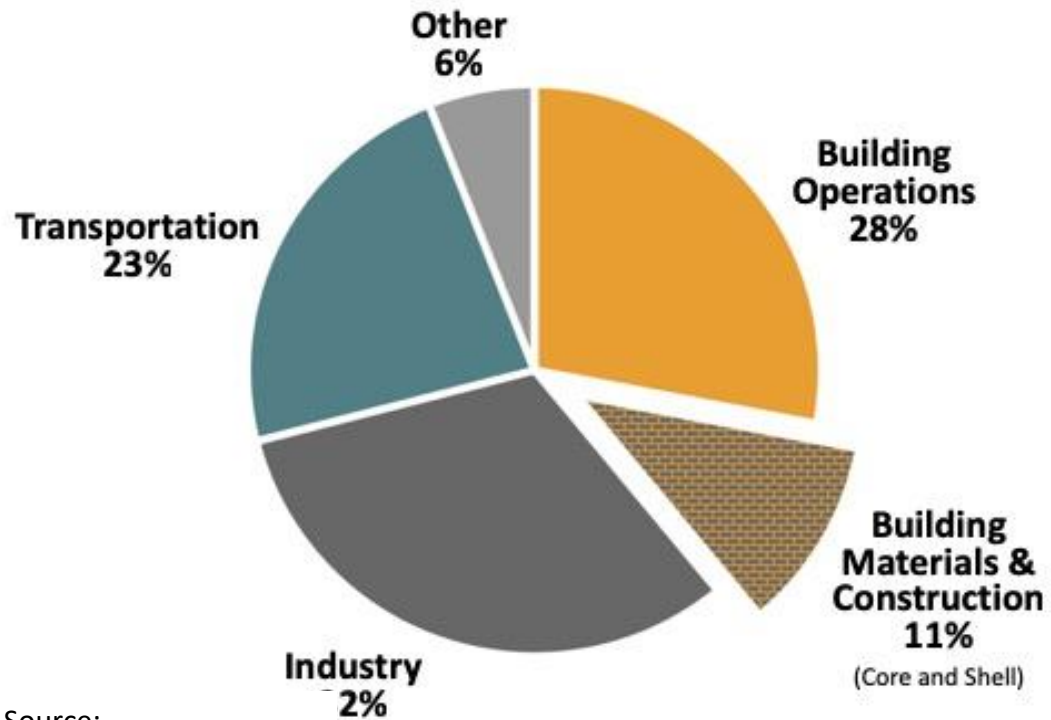
#RiDaysEU #SciencelsWonderful!

DuR SAAM

Green Concrete for Sustainability

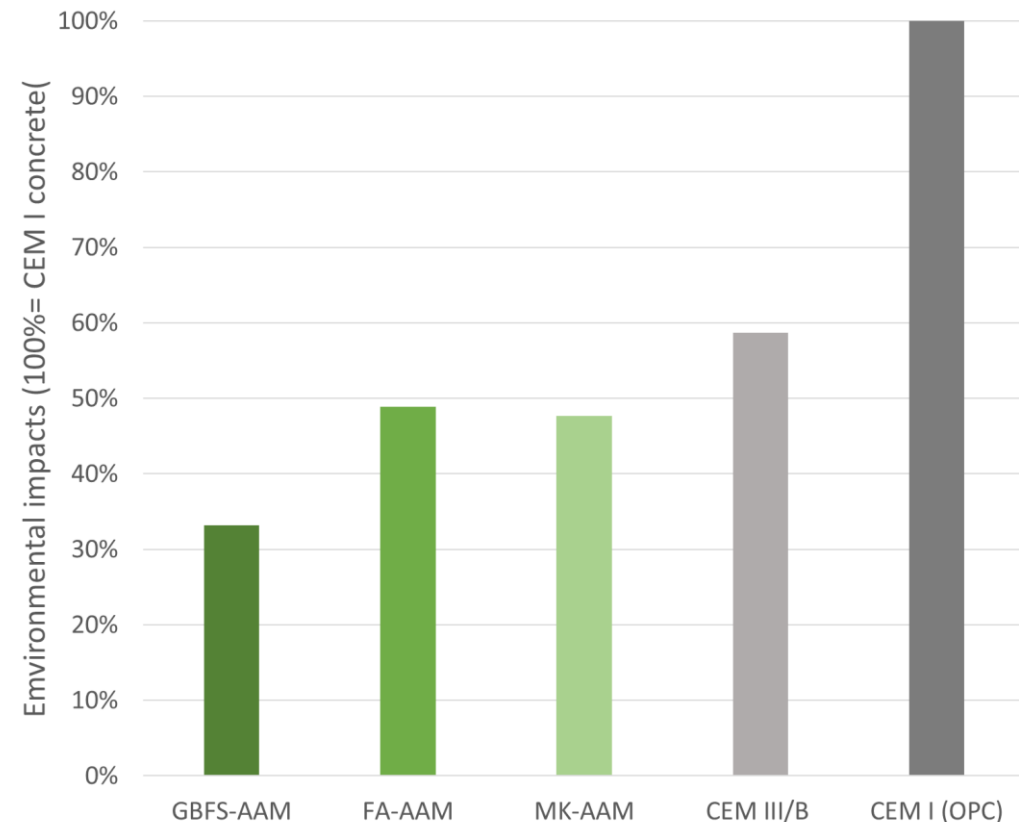
Alkali Activated Materials A GREEN SOLUTION TO OPC?

Global CO₂ Emissions by Sector

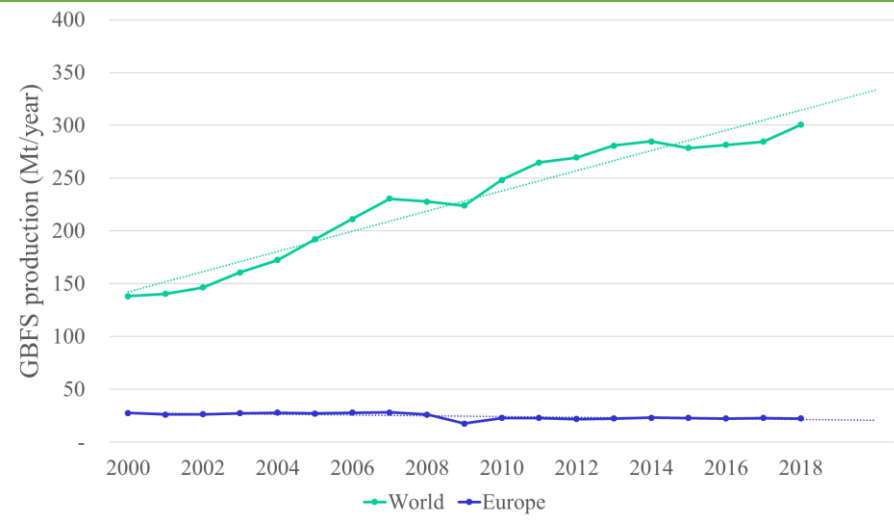


Source:
Architecture2030

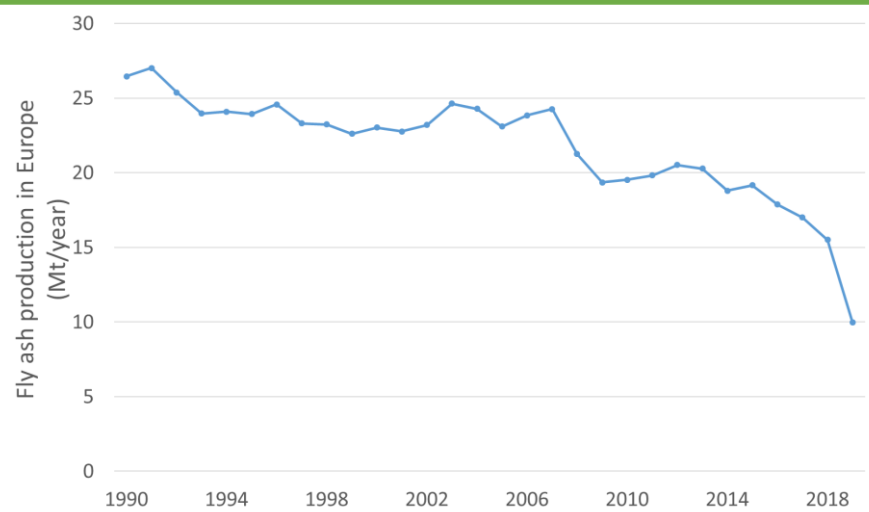
GWP (CO₂ eq.)



Availability of traditional precursors is deminishing in Europe, therefore there is a need to explore alternative materials.



Source: Worldsteel



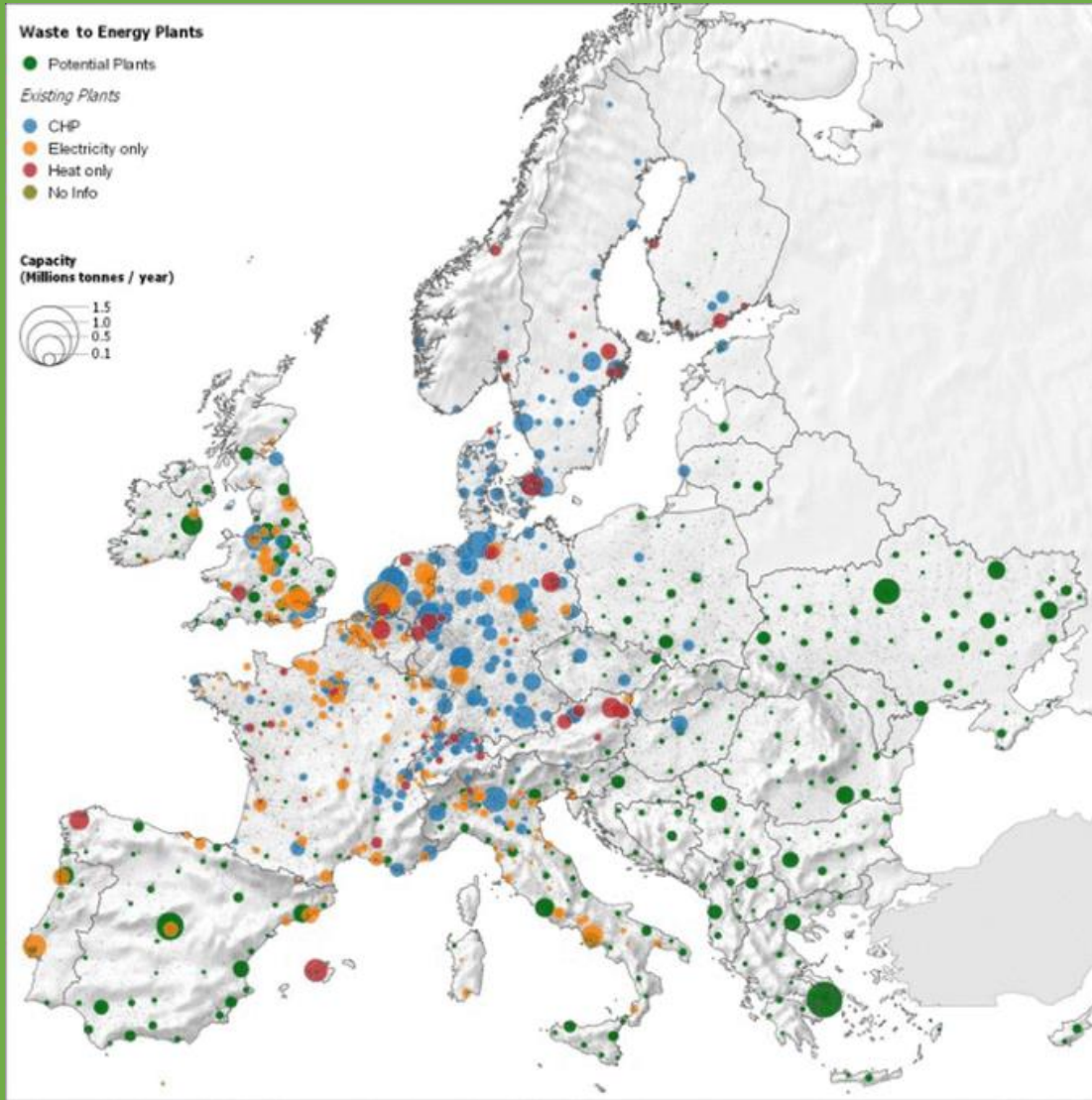
Source: Eurostat, 2019

Municipal solid waste incineration ashes are being examined as alternative precursors with increasing supply.

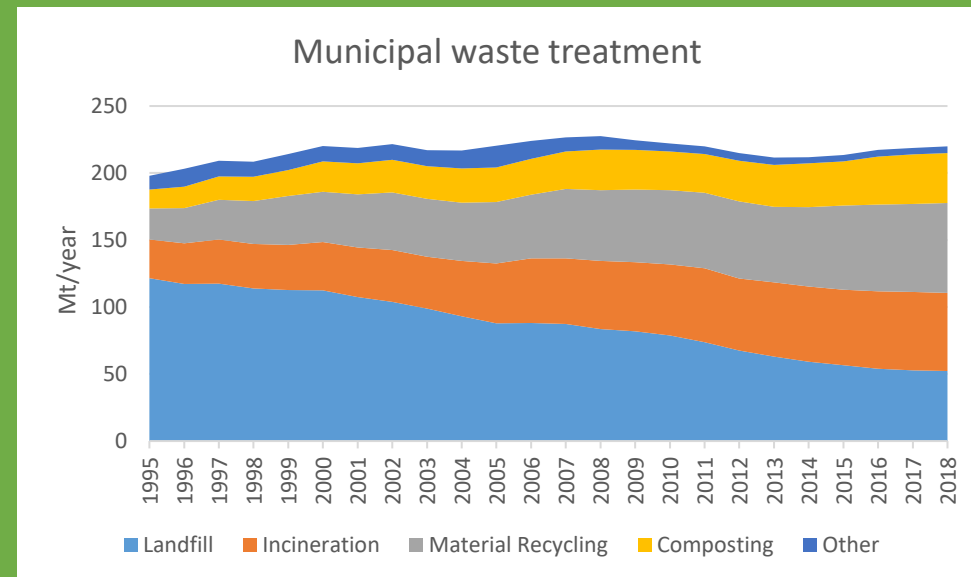
MSWI bottom ash



Mineral wool waste



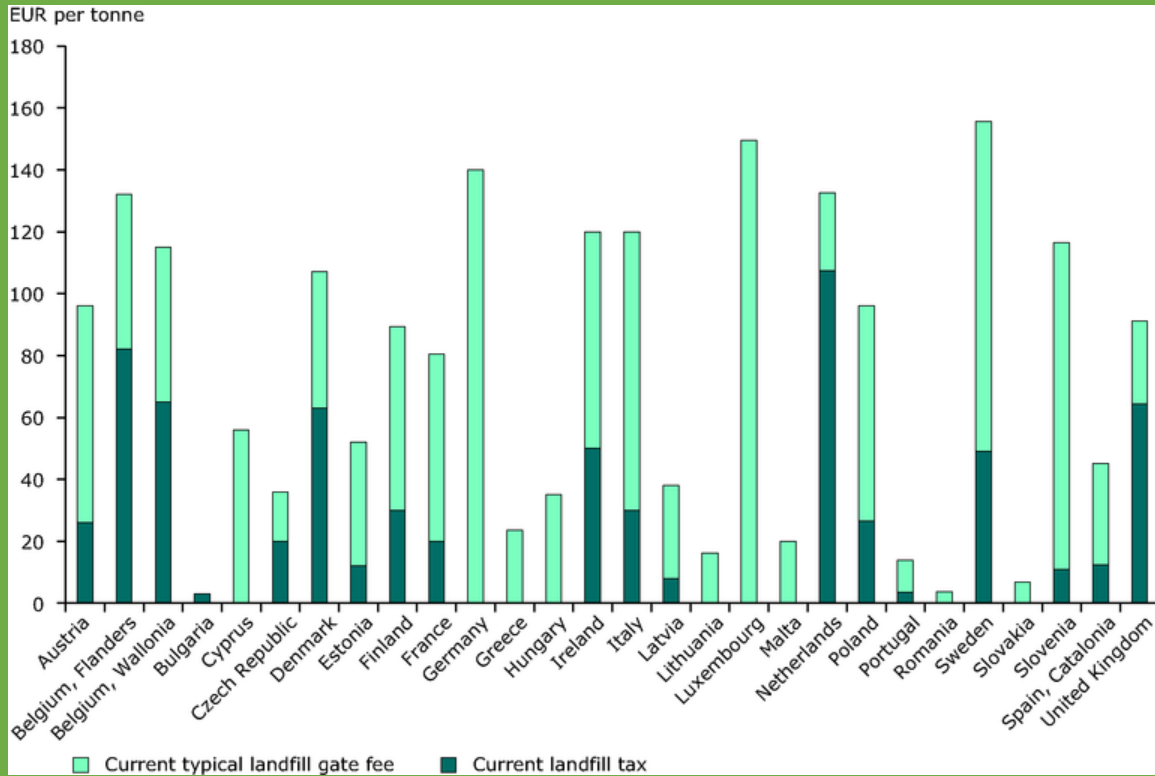
Source: Scarlat et al., 2019



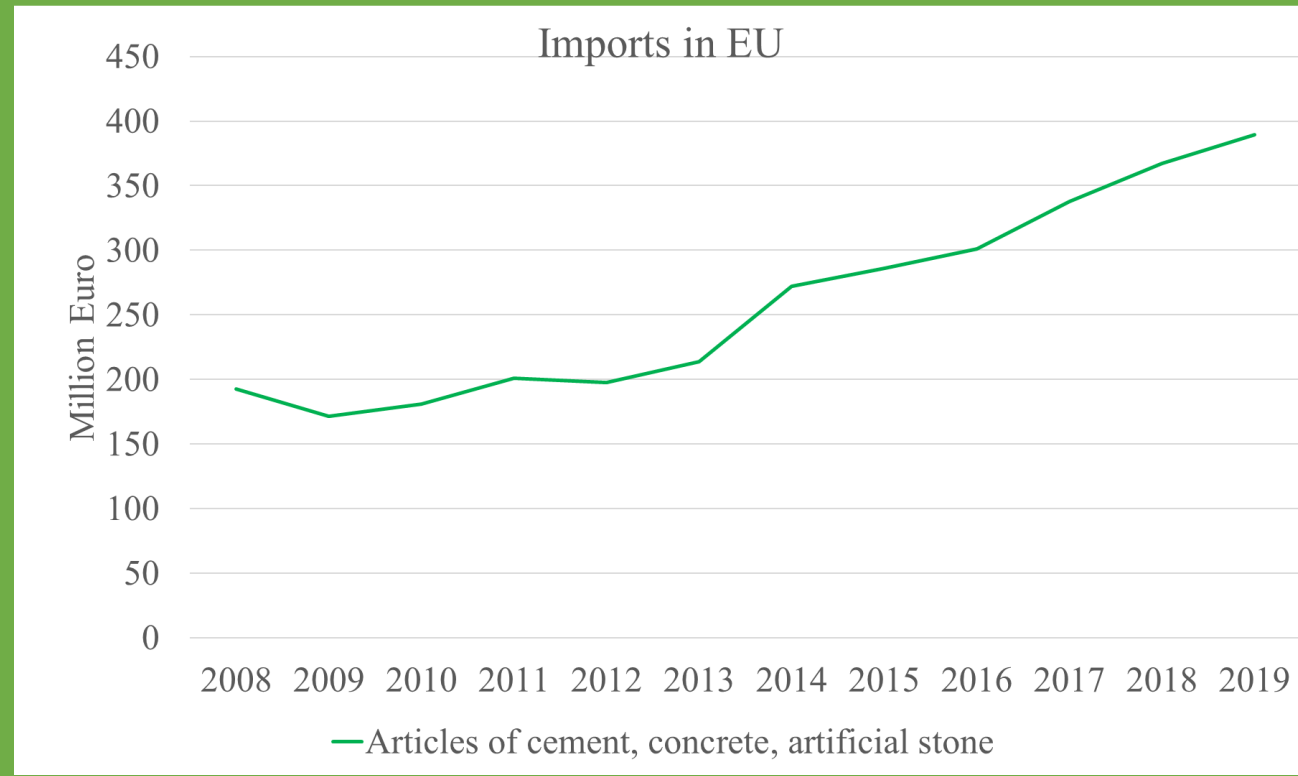
Source: Eurostat

Landfill costs in Europe can be avoided by valorising waste materials in AAM technology.

Current imports of concrete in Europe equal 400 Mill. EUR. Production and supply of AAMs will contribute to economic growth within Europe.

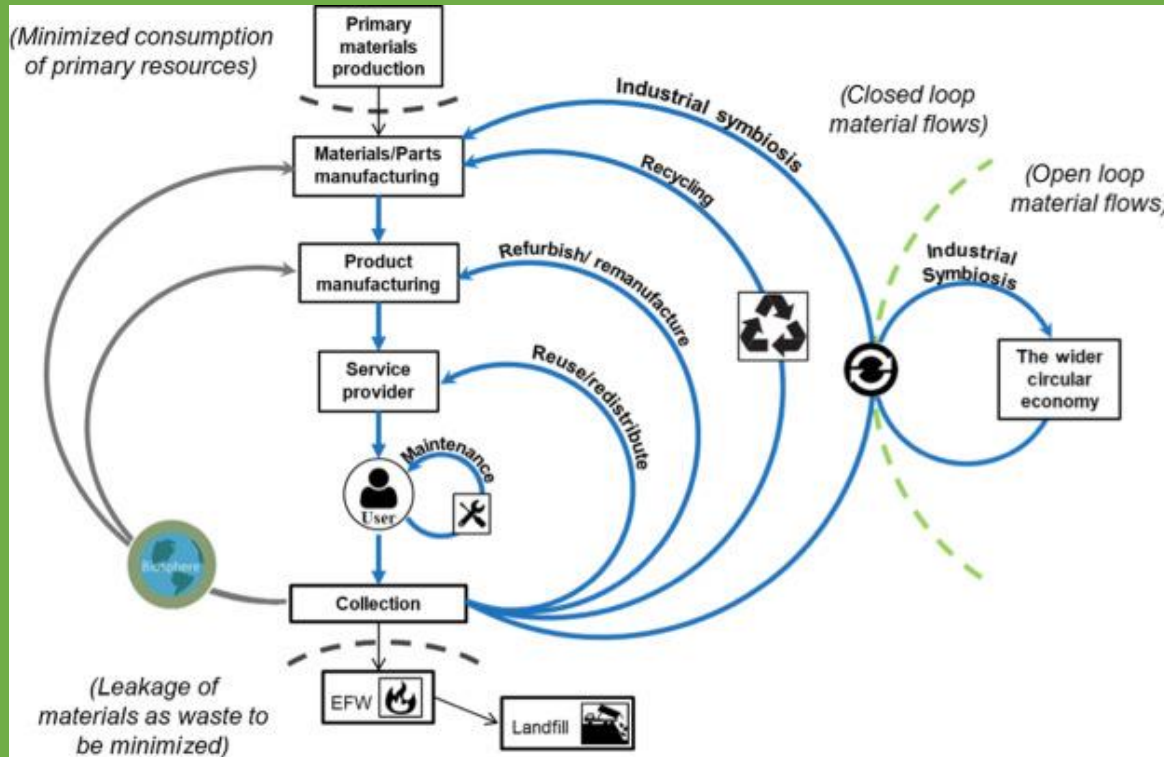


Source: EEA, 2013



Source: Tradeconomy

Within Circular Economy, AAM technology fosters industrial symbiosis and creates new business opportunities.



Source: Charles et al., 2018

