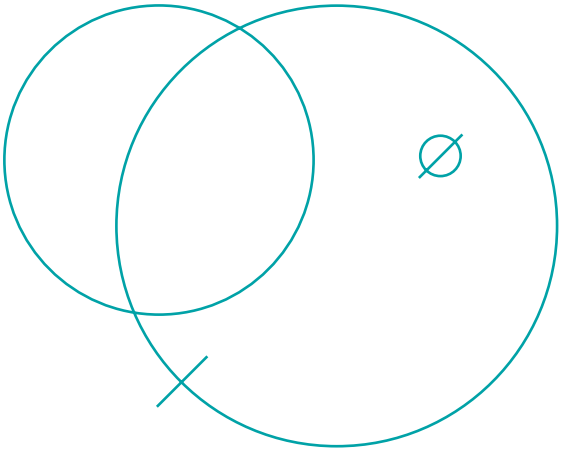

Full Cycle of Lime

Here is the chemical reaction for the lime process:

Limestone containing Calcium Carbonate ($CaCO_3$) is crushed and burned at high temperatures:

$CaCO_3 \longrightarrow CaO$ (Calcium Oxide) + CO_2 (Carbon Dioxide) which evaporates.

-the process to slake and age the lime before use starts:

$CaO + H_2O \longrightarrow Ca(OH)_2$ which is Calcium Hydroxide (putty lime or Grassello)

-when the Grassello is applied, the Carbonation reaction starts right away, picking up natural CO_2 molecules from the atmosphere and evaporating water:

$Ca(OH)_2 = CO_2 \longrightarrow CaCO_3$ (Calcium Oxide or LIMESTONE again!) plus H_2O which evaporates.

The limestone becomes limestone again (without any impurities)!!!

That is why lime is so durable, environmentally friendly and beautiful – as long as synthetics are not added to it!