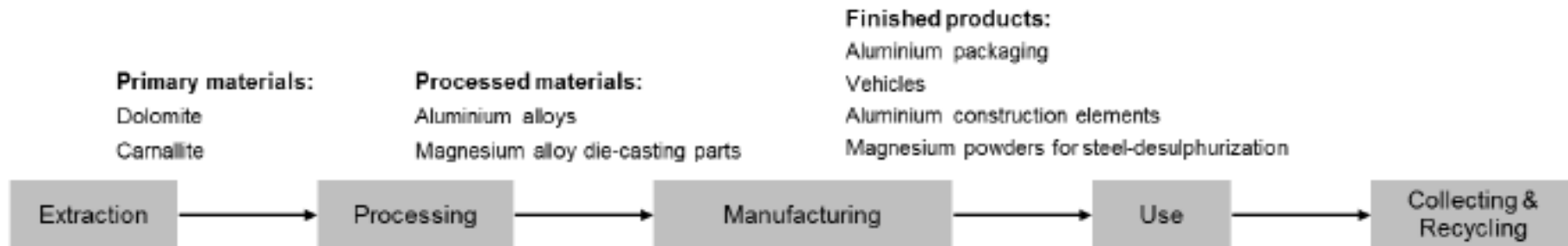


# Magnesium

Magnesium is currently produced through two main processes: thermic reduction and electrolysis. The global main producer of magnesium – China – uses almost exclusively thermic reduction with dolomite as input raw material. Other producing countries use the electrolysis process with magnesium-rich salts (e.g. carnallite), magnesium-rich brines and seawater as input raw materials. The primary materials are processed into magnesium and then further processed into aluminium alloys and magnesium alloy for die-casting, the latter being finally processed into magnesium diecasting parts. Aluminium alloys containing magnesium are used in a wide range of applications such as packaging, transport and construction. Magnesium alloy die-casting parts are chiefly used in the automobile industry (as well as in aerospace components) because of the need for lightweight materials and premium corrosion performance. Magnesium is also an efficient desulphurizing agent used in the production of crude steel (but not incorporated in steel). In addition, magnesium has a range of other metallurgical, chemical and electrochemical uses, although these all remain relatively minor sources of consumption. The figure below presents the value chain of magnesium with the main uses.



โซ่คุณค่าของ Magnesium