

Human Interaction with the Rock Cycle

Humans interact with the rock cycle by **mining** rocks for useful minerals such as gold and for fuel such as coal, oil and gas. Metals are found within igneous and sedimentary rocks. The metals are deposited when hot metal rich fluids produced by volcanic activity pass through joints in rocks and cool.

Oil and gas are formed when organic material buried in sedimentary rock is subjected to heat and pressure. It is converted into oil and gas which are held in pore spaces between grains



They also quarry which is the removal of stone from large open pits dug into the earth's surface. Quarries provide materials for the construction industry, marble for sculpture and kitchen worktops.

Quarrying.

All types of rock can be quarried, Igneous such as basalt, sedimentary - limestone and metamorphic - marble, Weathered and eroded particles such as sand and gravel are also important.

There are several methods of quarrying which depends on the rock type involved or how it is to be used. Explosives are used to remove large volumes of rock that does not need to be in large pieces such as the cement industry. Channelling cuts large slices of rock that can be cut into shapes.

Positive impact of Quarrying

- Quarrying can have an important economic impact. They provide jobs in construction in the quarries themselves and distribution. Two major companies in Ireland are Roadstone and Readymix.
- Local infrastructure may be improved along access routes.

- Quarries can attract other industries into the area.
- They provide important raw materials such as lime for the agriculture industry. This is used to promote grass growth and provide higher milk yields.

Negative impact of Quarrying

- Quarrying can have a negative impact on the environment and landscape. It is noisy and dusty. They can cause visual pollution from the large buildings and slag heaps.
- Blasting and digging can cause damage to buildings and they can scar the landscape . This can cause noise pollution.
- Pollution from the quarry can run off into the local river. Wildlife Habitates are initially lost when the quarry opens.
- Quarries can become safety hazards if they are not well fenced.