

SEE — SCIENCE / GEOGRAPHY · 5TH–6TH CLASS

Portaigh agus an Aeráid

Boglands & Climate Science — 5th & 6th Class

Bogs and the climate crisis

1

Bogs as carbon stores

Irish bogs have been storing carbon for 10,000 years — absorbing CO₂ from the atmosphere and locking it into peat. An intact raised bog stores 10 times more carbon per hectare than a tropical rainforest.

2

Peat extraction and CO₂ release

When peat is cut and burned as fuel, thousands of years of stored carbon is released as CO₂ in minutes. Drained bogs also release carbon even without burning.

3

Bord na Móna

The semi-state company that harvested peat from the Irish midlands for fuel. Now pivoting to wind energy, rehabilitating worked-out bogs, and developing solar energy on former peatland.

4

Bog restoration

Blocking the drainage channels (drains) in a degraded bog allows it to rewet. A rewetted bog can become a carbon sink again within years. Ireland has committed to restoring 33,000 hectares of degraded bogland.

5

Climate targets

Ireland must reduce greenhouse gas emissions 51% by 2030 (Climate Action Plan). Bogland restoration is one of the most cost-effective ways to reduce emissions from the land sector.



6

Community impact

Many midland communities have been dependent on peat harvesting for generations. The transition to a post-peat economy requires new jobs in renewables, ecological restoration, and eco-tourism.

