

Fact Sheet: Reforesting Former Mine Lands with the Carbon Offset Market

Priorities for A Pilot Project in Central Appalachia

Uniting Needs with Resources

- **Mine reclamation** is the process of remediating damaged land and water after mining, and it is needed across Appalachia, with more than 1.3 million acres of former mine land in Appalachia and the East partially or totally unreclaimed. Mine cleanup is costly. Appalachian Voices estimates the cost of reclaiming post-1977 modern-era mines alone to be between at least \$7.5 billion to \$9.9 billion.
- At the same time, **carbon markets** are expanding worldwide, surging to a value of \$277 billion in 2022. These markets trade the sale of “credits” for the reduction and removal of carbon dioxide, which can be accomplished through nature-based solutions like reforestation.
- **Reforestation** may be the key to marrying Appalachia’s need for mine land reclamation with the global carbon markets’ need to reduce atmospheric carbon dioxide levels.
- Appalachian Voices received a multi-year grant from Carbon180 to explore the possibilities of **reforesting former mine land in connection with carbon markets**.

Priorities for Central Appalachia

Reforestation on former mine lands can meaningfully remove carbon dioxide from the atmosphere and also contribute additional social and environmental benefits. Ensuring success in Central Appalachia requires local leadership with the following priorities.

1 Restoring native ecosystems using the Forestry Reclamation Approach

The Appalachian Regional Reforestation Initiative designed Forestry Reclamation Approach guidelines for restoring healthy native ecosystems on active, abandoned, and legacy (bond-released) mine land sites. These steps include creating suitable soil conditions through reclamation as well as planting native trees and shrubs.

2 Planning for monitoring and verification of carbon sequestration levels

To fund the restoration and reclamation Appalachian Voices hopes to accomplish, a pilot project must meet the status of a high-quality carbon credit that centers around planning with a framework that takes place over decades.

3 Designing for multi-benefits in the long term

In addition to restoring native ecosystems, a meaningful reforestation project for Central Appalachia will plan for and document wider ecosystem benefits, like water quality improvements and decreased soil erosion, as well as connections to local economies, such as local workforce hiring. Planning with these goals will also demonstrate for carbon market buyers that the project is a high-quality investment.