

FAQs: Forest Carbon Projects for Municipalities

1. How do carbon offsets work?

All forests store carbon in wood, leaves, and other plant biomass, but the amount of carbon depends on how the forests are managed and harvested. By agreeing to manage forests to store more carbon than typical, landowners can sell the “additional” carbon kept out of the air to anyone interested in offsetting their own carbon emissions. In effect, companies and individuals pay landowners to agree to store more carbon in forests, making forest carbon a “product” that can be sold and purchased.

2. What are the advantages of selling carbon for municipalities?

A successful, well-developed forest carbon project creates a sustainable revenue source for a town over many years. Often, towns or organizations reinvest the money earned from offsets into other conservation initiatives. There are also numerous co-benefits of mature forests, including improved wildlife habitat, recreation, or ecosystem services like water quality and flood protection.

3. Are there minimum acreage requirements?

A standalone carbon project in New England typically needs at least 3,000 acres of well-stocked forest for revenue to exceed the initial development costs. Towns with less acreage can pool their land with neighboring municipalities under one project. This is called an aggregated project, and works best with 2-3 municipalities with good existing relationships, administrative capabilities from at least one municipality, and legal agreements that clarify responsibilities.

4. How much does it cost to develop a forest carbon project?

Costs vary widely depending on the size of the project, forest carbon stocking levels, and the staff time required to manage it. Typically, project developers front the costs of conducting a feasibility study, forest inventory, and other project development activities and are compensated with a percentage of the credits (revenue) generated by the project. However, municipal staff time will need to be dedicated for gathering relevant documents, communicating with the developer (and partners if an aggregated project), and conducting a public approval process. It is also highly recommended to seek legal counsel before signing long term contracts with the developer, registry, and carbon buyer.

5. How long does it take to develop a municipal carbon project?

Traditional forests carbon offset projects take about two years to develop and sell credits. Many factors influence project development: the municipal approval process, navigating legal ramifications, completing a detailed forest inventory, registering and verifying the credits, and finding a buyer.

6. What is a project developer—and do we really need one?

A project developer is a consultant specialized in carbon markets. They are critical partners for any municipality without existing carbon project experience. Project developers provide guidance on what type of carbon project to pursue, how to align the project with other municipal goals, and which protocols and registries are most appropriate. Developers can manage a project from end-to-end, from modeling the carbon benefit of the project, to securing third-party verification and registering the project.

7. How much revenue have other projects generated? When can the town expect revenue?

Revenue depends on 1) the number of credits generated by the project and 2) the price at which the credits sell. Forest carbon projects can cost hundreds of thousands of dollars to implement, but can net landowners many times this in revenue. Each project is unique and generates a different amount of credits: projects in New England have generated anywhere from 5-80 credits per acre. On the voluntary market, credits range from \$1-\$14/mT CO₂e (average prices \$6-\$8/mT CO₂e). On the regulatory market, credits sold for around \$14/mT CO₂e in 2019.

8. What skills, knowledge, or staffing does our town need to have?

Though a project developer (consultant) takes on most of the work to bring a project to life and manage it, projects do require municipal staff in early stages. Typically, staff help gather town documents and resources to inform a feasibility study and also facilitate the public approval process for project development. Towns may also require external assistance (i.e. forester, surveyor, outside counsel, title researcher) to develop a project. Finally, there are routine administrative tasks to be performed by the municipality over the project lifetime to meet project monitoring requirements.

9. What are the potential drawbacks and risks of a carbon offset project?

While rare, some projects begin development but never sell credits, leading to sunk time and money. Most of this risk is carried by project developers, but municipalities also accrue costs.

Carbon projects also limit long-term management options for a forest. Each project follows a specific “protocol” or approved forest management plan over a specified contract term (often decades). Depending on the protocol, municipalities may face limited options for managing forests for other land management goals, or when planning for or responding to forest health concerns. Some towns may also be interested in developing an offset project on municipal land to meet net-zero goals. However, to claim credit for the emissions reduction, towns would need to ensure a local buyer for the credits.

10. Our town is interested in a municipal forest carbon project. What are the first steps?

- I. **Become informed.** Learn as much as possible about the approaches, requirements, costs, and timelines for forest carbon offset projects. To learn more about these concepts, refer to the publication [Forest Carbon Market Solutions: A Guide for Massachusetts Municipalities](#) or watch a [webinar](#) about this topic from the 2021 virtual Town Forest Conference. Additionally, Mass Audubon is available to provide technical support to towns interested in carbon projects. For more information, please contact: climateforestry@massaudubon.org
- II. **Assemble and evaluate the required resources** to evaluate project feasibility, including:
 - a. GIS spatial data of municipal properties under consideration
 - b. Property deeds
 - c. Conservation restrictions or other legal restrictions on land-use or management
 - d. Forest Management Plan(s)
 - e. Forest Inventory data
 - f. Information on recent harvests
- III. **Start or continue the public approval process**
- IV. **Line up partners.** Municipal lands may be controlled by different entities in town government or an aggregated project may combine land from different municipalities.
- V. **Contact a project developer,** who will use these documents and data to inform discussions with the town about project approaches and feasibility.