



Town of Harvard, MA

Climate Action & Sustainability Planning Services

Project Summary

The Town of Harvard had a small budget and a short timeline to meet grant requirements related to the development of a climate action and resilience plan that placed a large emphasis on its agricultural sector. KLA worked with the Town and its stakeholders to creatively develop two pathways to meet these requirements by working directly with the Agricultural Commission to develop an Agricultural Climate Action Plan. KLA also provided a template and guidance to the Town's Community Resilience Working Group to drive the development of a Town-wide Climate Action and Resilience Plan.

Timeline: 2020

Project Highlight

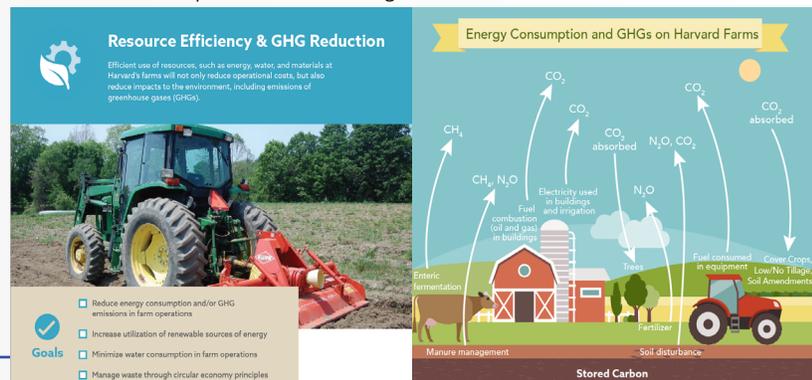
One of the primary chronic stressors preventing Harvard farms from taking action to prepare for and reduce their contribution to climate change was the economic challenge of running a farm in Harvard. The KLA Team worked to address this by developing a brand, **Harvard Grown**, and a website and map to promote all of Harvard's community of farms as a collective destination.



Activities & Outcomes

- Facilitation of a vision and goal-setting process
- Completion of a baseline GPC compliant GHG inventory for community-wide emissions and review of an LGOP compliant GHG inventory for government operations
- Delivery of two branding processes- one for the Town-wide action on climate; **Harvard's Climate Initiative**, and one for the Agricultural sector; **Harvard Grown**
- Design and execution of a 4-month process resulting in the creation of Harvard's Agricultural Climate Action Plan
- Facilitation of Harvard's Agricultural Commission to guide plan development
- Development of a Climate Resilience and Nature-Based Solutions Framework
- Completion of implementation blueprints for key strategies within the Agricultural Plan
- Creation of a climate action plan template and outline and associated guidance documents for Harvard's Community Resilience Working Group to build their own climate action plan
- Design and development of the Harvard Grown website

Excerpt from the Harvard Agricultural Climate Action Plan



While agriculture is a significant and visible part of Harvard's identity, active areas of production only make up about 8% of total land area.¹⁶ Globally, emissions related to agricultural production activities, not counting land use change account for about 12% of all GHGs and only about 6% in the United States.¹⁷ In Harvard, GHGs from direct agricultural activities are estimated at less than 1% of overall community-wide GHG emissions. In some ways, this reflects the lighter footprint approach that many Harvard producers already take on their farms. Small, diversified vegetable farms do not have the same level of mechanization and other inputs needed to support intensive monoculture operations. Livestock numbers in town are at a scale where land can absorb and recycle waste and nutrients locally. This and other practices to reduce fertilizer use limit GHGs from that source compared to what they could be if only synthetic fertilizers were applied.

As seen in the diagram above, greenhouse gases (GHGs) from agricultural activities directly are not the only sources of emissions from farms. Within Harvard's GHG inventory, energy use in buildings to support farm operations in one area that is currently aggregated with all other building energy use in the community, as well as the energy used to pump well water for irrigation and livestock. Like all businesses, some amount of their activity takes place beyond their fences, such as transporting crops to the market or customers coming to the farm. Efficiency opportunities to reduce energy and water demand exist across farm operations.