



Working Landscapes Certificates

A Market-Based Approach to Environmental Stewardship on Agricultural Lands

Introduction

Agricultural production, which makes up over 40 percent of the land use in the United States, has a clear and significant impact on our natural environment. Farming can be fossil fuel and resource intensive, degrade water and soil quality and endanger natural habitat and biodiversity. But agriculture can also improve water and soil health, provide refuge and food for wildlife and increase biodiversity and economic prosperity for farmers, their families and communities.

The stark differences between these outcomes of agricultural production—and the extra costs associated with pollution exposure and remediation—are not generally accounted for in prices paid by manufacturers, retailers and consumers. For commodity crops such as corn, soybeans and wheat, which account for the vast majority of production in most of the country, prices are set by global market forces and farmers have little opportunity to differentiate their products. These commodity crops are generally purchased by grain buyers, brought to central storage and delivery points and then mixed to promote uniformity of quality and moisture content. By its nature, the commodity system makes tracing and separating crops difficult, allowing few mechanisms for companies and customers to distinguish and compensate for farming in ways that benefit the environment.

While many processors and consumers of commodity-based products would prefer to use crops produced in a more sustainable manner, the cost and complexity of identity preservation and transportation create huge logistical challenges. Furthermore, identity preservation can sometimes, through extended supply and transportation chains, actually minimize the overall “sustainability value” of this crop production by increasing energy use and emissions outputs. Until the processing and transportation infrastructure to support this product differentiation can be built, there is a clear need for an approach that rewards farmers for both their agricultural production and the environmental services they provide.

Lessons from Renewable Energy

An answer to this vexing problem may be to separate the “sustainability” attributes from the commodity itself. This approach is already in use as a way to encourage environmentally friendly production in a system with many similarities to commodity agriculture—energy production. With electricity production being widely dispersed and nearly impossible to track under our grid system, customers are either unable to determine from which production system (coal, nuclear, renewable, etc.) they receive their power or it is cost prohibitive to directly source their energy from “green” sources.

Despite these infrastructure constraints, many customers are interested in promoting wind and other renewable energy sources. An innovative solution to this problem was the creation of Tradeable Renewable Certificates (TRCs), commonly referred to as “green tags,” whereby the environmental benefits of renewable electricity production (reduced CO₂, sulfur dioxide, etc. in the atmosphere) are separated from the electricity production. Under this system, renewable energy producers are able to sell the electricity and the environmental benefits of their production as two, distinct products on two different markets.

The customer in this arrangement “buys” the sustainability aspects encompassed by the green tags under an enforceable contract coordinated by a third party, while the electricity is sold as generic power. A homeowner or business, for example, can then support renewable energy through the purchase of TRCs linked to their energy use, even if the electricity they actually receive comes from a conventional source. The result is a mechanism that allows customers to promote renewable energy production and environmental protection in the energy sector and displace conventional production, without requiring the additional infrastructure and costs of directly purchasing green power.

Working Landscapes Certificates as an Alternative Crop

A green tag system for commodity agriculture would function in a similar manner. Participating farmers would raise their crops under approved sustainability standards that are verified by a certification entity. The farmer will then have two products to sell: the crop itself and the quantified

ecological benefits contained in the Working Landscapes Certificate (WLC). Manufacturers, retailers and even consumers interested in promoting sustainable agriculture can purchase the WLCs for the commodity crops that they consume, without the added expense and constraints of finding and sourcing certified, sustainably grown crops from their local area. The environmental attributes of the specific crop that they purchase will not necessarily change, but the purchase of WLCs will promote sustainable production practices somewhere in the commodity system, while also demonstrating to farmers that a growing market exists for sustainably grown commodity crops.

With the current infrastructure challenges to identity-preservation, this system allows users of commodity crops to encourage sustainable production, provide additional income to farmers using sustainable practices, and reduce the overall ecological impact of agricultural production. WLCs can be seen as a bridge to resolve some of the infrastructure and sustainable feedstock supply issues, as they help “grow” the number of farmers producing commodity crops sustainably. This approach can also allow companies—at a much-reduced cost from directly sourcing the materials—to support farmers in making changes to their production systems. And as the number of farmers producing crops in a sustainable manner increases, companies interested in directly purchasing sustainable feedstocks will have an increased base of supply from which they can source.

Working Landscape Certificates in Practice

WLCs are voluntary and calibrated on a geographic (i.e. per acre) basis. This approach eliminates the built-in incentive to produce more than may be environmentally appropriate a production-based premium provides. Farmers selling WLCs will take specific, measurable steps to improve the environmental impact of their commodity crop production. In particular, these will include:

- ▶ Use of non-Genetically Modified (GM) crop varieties to protect biodiversity
- ▶ No continuous annual crop production on same acreage
- ▶ Soil testing on contracted acres and fertilization according to test results and state agronomic recommendations to assure that nutrients are used efficiently and are not likely to leach or run-off into water sources

- ▶ No use of chemicals that are known human or animal carcinogens
- ▶ Use of cover crops or assurance that at least 30 percent of crop residues remain on the entire field to minimize soil erosion
- ▶ Creation of whole farm plan that includes information on biodiversity and energy use to quantify and set targets for improving on-farm energy efficiency and biodiversity and overall farm sustainability

These practices will not by themselves lead to full farm sustainability, but in the current commodity production system, they are achievable and proven first-steps that can reduce some of the negative environmental impacts of commodity crop production. As WLCs become established, participating farmers will be required to take additional steps towards improved farm sustainability, including measures to increase biodiversity, reduce energy and resource utilization, and move towards more appropriate and environmentally beneficial farm practices.

Making Working Landscapes Certificates a Reality

The Institute for Agriculture and Trade Policy (IATP) is working with several partners, including organizations that created the green tag program for energy, to develop the infrastructure and market for a WLC system as part of its efforts towards developing sustainable standards for biomass crop production. IATP is currently engaging companies, consumer groups and farmers to identify key concerns and potential demand, and based on the outcomes of these discussions, expects to launch the WLC program in 2007.

As one of the fastest growing areas of commodity utilization, the bioindustrial sector is increasingly looking at the entire life cycle of products. Optimizing the value of these bio-based materials and products requires consideration of production, landscape and farm profitability impacts. WLCs are a potentially valuable tool for addressing these issues, by providing a traceable system that can be used to promote and verify commodity crop production that meets specific sustainability criteria, and to compensate farmers willing to take these steps. Considering the current impact of agricultural production on the environment and the limitations of the commodity infrastructure, WLCs are a way to begin moving agriculture in a more sustainable direction.

For more information about Working Landscapes Certificates, visit workinglandscapes.org

For more information about IATP's Sustainable Biomass Standards, contact Jim Kleinschmit, Director, Rural Communities
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