



Section 5: Advancing the Vision

Moving Forward with the 25x'25 Vision

To achieve a vision of such magnitude, decision makers and the general public must understand the importance and benefits of renewable energy from working lands. Enabling policies must be crafted to help accelerate the commercial development and deployment of renewable forms of energy. Technological barriers must be overcome. Equity capital must be raised. Commercial-scale processing plants and distribution systems must be constructed using new technologies that overcome processing, transportation, transmission and distribution challenges. While each of these undertakings represents a challenge, the agricultural and forestry communities are working together to pool their collective resources and work collaboratively with partners to craft new energy solutions for the nation.

Foundational Principles for Getting to 25x'25

This plan sets forth a road map that the 25x'25 partners have constructed to achieve 25x'25. Over the past year, representatives from the endorsing entities have been meeting jointly and in working groups to develop the detailed implementation recommendations that are contained in this plan. The 25x'25 goal and Action Plan stand on a foundation of five key principles:

- Efficiency – Improving energy efficiency is the first step toward achieving the 25x'25 goal and strengthening our economy, security and environment. Significant energy efficiency improvements are possible and necessary to reduce total energy demand and help reach the 25x'25 goal.
- Partnership – No one region or sector can, by itself, achieve the 25x'25 goal. It must be built on partnerships among many diverse stakeholders.

- Commitment – Decision makers must maintain a stable commitment to renewable energy over a sustained period of time to create the right policy environment and market circumstances for its success.
- Sustainability – To be a long-term solution for America, renewable energy production must conserve, enhance and protect natural resources and be economically viable, environmentally sound, and socially acceptable.
- Opportunity – The opportunities for renewable energy are ubiquitous – every region of the United States has the potential to produce and benefit from renewable energy. Seizing those opportunities will enhance:

Foundational Principles for Getting to 25x'25

Efficiency

Partnership

Commitment

Sustainability

Opportunity

- o Economic growth by expanding rural development, creating new jobs and reducing consumer energy costs.
- o National security by reducing dependence on oil.
- o Environmental protection by reducing soil erosion and improving soil, water and air quality and wildlife habitat.

What Must Happen to Achieve 25x'25

In order to accomplish the 25x'25 goal, **energy efficiency improvements must be the option of first choice** in all energy decisions. Agriculture and forestry can play a leadership role in reducing our overall energy demand growth through strong energy efficiency measures, making it easier to meet our renewable energy objective.

Second, we must **dramatically increase the production of renewable energy**. After efficiency, renewable sources will be the first choice for electricity generation where it is safe, reliable and affordable. We can produce 65 billion to 86 billion gallons per year of biofuels and generate 800 billion kilowatt-hours a year of electricity. Meeting the 25x'25 goal will further lower the costs of renewable energy so that it is competitive with fossil fuels, and lead to the development of a new array of value-added renewable products. The vision calls for the production of 250 million gallons of cellulosic ethanol by 2012, as called for in the Renewable Fuel Standard, and construction of a new generation of cellulosic biofuel and biodiesel plants.

A third key area of focus is the **delivery of renewable energy to markets**. The 25x'25 vision calls for the creation of an expanded network of pipelines, rail lines, pumps, ports and other shipping facilities, new pipeline and shipping opportunities for renewable fuels. Transmission and distribution systems should be built and better managed. All renewable electricity producers should gain access to the grid to get power to markets, expanding distributed generation that produces power locally.

Fourth, a renewable energy market must be built by **increasing consumer demand** for biofuels and renewable electricity – boosting the number of flex-fueled vehicles that can run on ether biofuels or gasoline, expanding the number of biofuels pumps to deliver fuel to the customer, simplifying consumer purchase of renewable energy and creating interstate markets for renewable energy credits.

Fifth, steps must be taken to **conserve, protect and enhance natural resources** by utilizing practices and systems that maintain or improve soil, water and air quality; conserve water; reduce invasive species; and improve wildlife habitat through the production of biomass.

Finally, **funding** to develop renewable energy must be increased. A significant private and public investment in renewable energy must be made to enable achievement of the 25x'25 goal.

Challenges to Meeting the 25x'25 Goal

There are three significant barriers that impede progress toward attaining the 25x'25 vision.

First, America's energy strategy has lacked a vision for renewable energy and has failed to make a long-term commitment to shift toward renewable energy. Absence of a long-term vision and commitment has led to a series of booms and busts in the development of renewable energy, creating problems for farmers, ranchers, forest landowners, developers and investors. It has also led to short-term issues, such as those being faced by the animal agriculture sector, where producers are experiencing price increases in many of their primary feedstocks as a result of dramatic increases in biofuel production. 25x'25 is exactly the sort of long-term vision the country needs, and policy makers and the public must sustain a steady national commitment to achieve it.

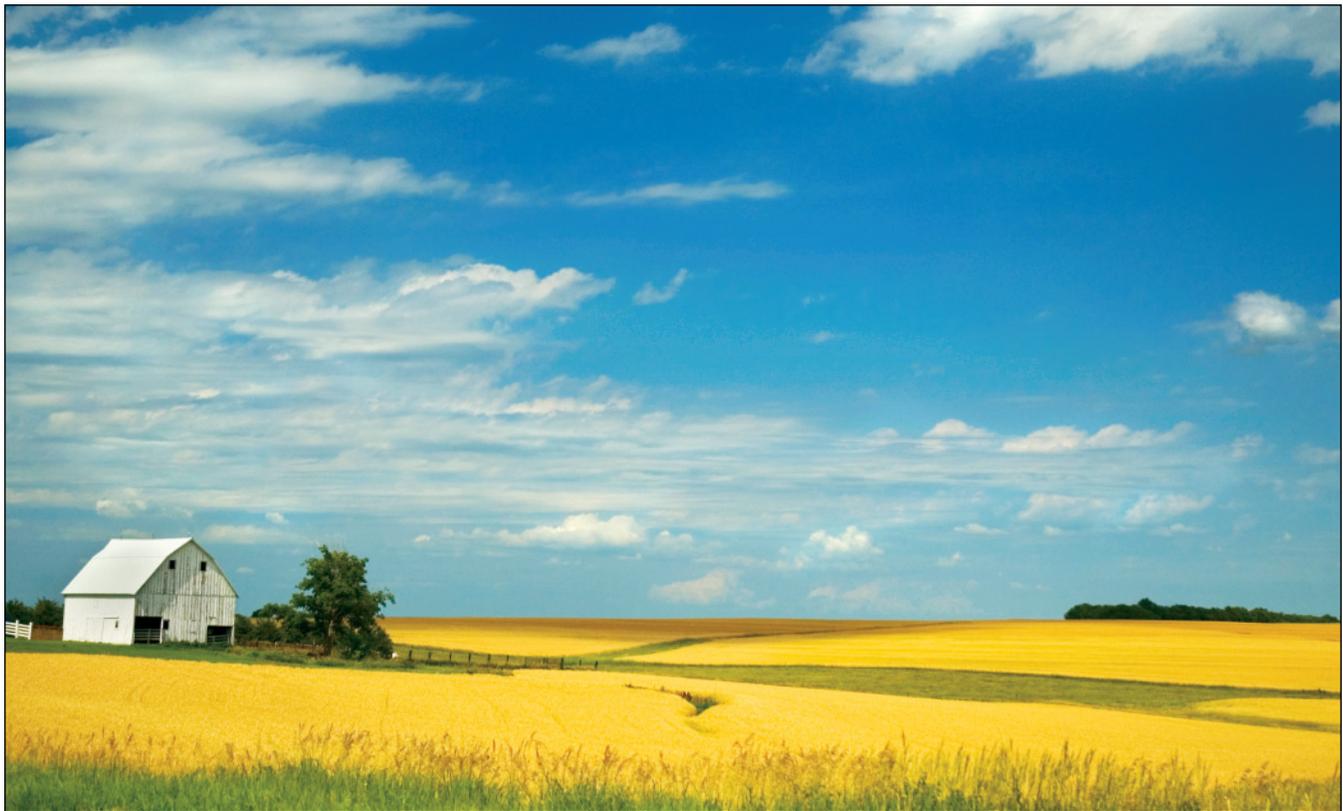
With that vision and long-term commitment, renewable energy can shift from being a low-volume, high-risk business to a high-volume, low-risk busi-

ness, thus lowering risks and increasing stability for farmers, ranchers, forest landowners, the livestock industry, developers and investors. Closing technology gaps through long-term commitment to research and development, for example, will help solve short-term problems such as those being experienced in the animal agriculture sector; short-term changes in technology and cropping practices and longer-term introduction of new biomass energy feedstocks will increase production and widen the spectrum of useable animal agriculture feedstocks.

Second, America's energy laws and policies protect and promote current energy systems and fail to reflect the economic development, national security and environmental benefits of renewable energy. Today's energy rules distort markets and keep renewable energy prices artificially high relative to other fuels. This

plan offers the first step in reshaping America's energy rules to get the prices right for renewable energy so that it can move into the marketplace in significant quantities and achieve the 25x'25 vision.

Finally, as with any form of change, current attitudes and mindsets of both opinion leaders and consumers present a challenge. These include a long-ingrained comfort level with the existing energy system, production systems and alliances, and a lack of understanding about how consumers can acquire renewable energy. This plan is intended to help change attitudes and mindsets, but we must go further. That is why this 25x'25 plan recommends a significant public education campaign commensurate with the 25x'25 goal and building new partnerships and alliances to carry the 25x'25 vision forward.



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