



# Climate-Friendly Food Systems

*Reducing climate impacts from farm to plate.*

We know all too well that climate affects our food systems, but we are now realizing that our food systems are affecting our climate. This in turn affects our ability to grow food.

To break this cycle, we need **healthy local food systems** that are resilient in the face of a changing climate and reduce the greenhouse gasses that can cause even more climate change. These systems would be energy-wise, community-centered, and based on production systems that rely on natural biological processes.

## PREVENTING CLIMATE CHANGE OR ADAPTING TO IT?

We obviously need to do both. Already we see the need to adapt to current climate change, such as protracted droughts occurring in some areas. Greenhouse gasses already released into the atmosphere will result in continuing climate change for a long time. We need to dramatically reduce greenhouse gas emissions now to prevent even greater impacts on the climate. Fortunately, many actions to reduce greenhouse gasses will help us adapt to rising energy costs and to the stresses a changing climate puts on our food systems.



## “NO-REGRETS STRATEGIES” ARE AVAILABLE NOW!

No one knows exactly how the climate will change. Scientists can predict changes in temperature better than in precipitation, but they are quite sure that variability in the weather will increase. Some things we can do now make sense no matter how the climate changes (or even if you are unconvinced that the climate is changing)—in other words, “No Regrets Strategies.” These strategies might include: soil building, reducing agricultural chemical use, more efficient processing and shipping, and using less packaging. These adaptations can both reduce emissions and make our food system more **resilient** in our future climate—whatever it may be.



# SUSTAINABLE FOOD SYSTEMS ARE MORE THAN JUST CLIMATE-FRIENDLY



They are affordable for consumers and profitable for farmers, focus on health and nutrition, are supported by the community and support it in turn, and make food—from farm to table—more enjoyable!

Until we stop relying on fossil fuels, our food systems will have significant climate impacts; however, there are plenty of ways to reduce these impacts while providing abundant, enjoyable, healthy foods.

## REDUCING CLIMATE & ENERGY IMPACTS



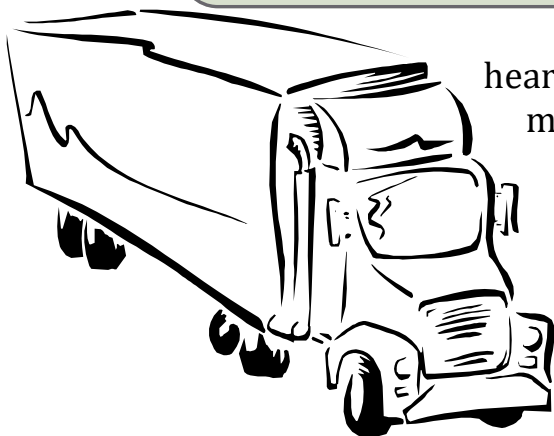
**Use energy wisely.** First and most important, reduce unnecessary use of any type of energy—for unsustainable production, long distance transport, nutrient-depleting processing, air-freighted produce, wasteful packaging, etc.

**Use energy carefully.** By all means, use energy efficiently whenever we need to use it.

**Use the right energy.** Seek more and more renewable and sustainable sources for the energy we do use. After all, food should be essentially solar energy!



## FOOD MILES ARE IMPORTANT...



Most people have heard that our food travels an average of 1500 miles or more from field to plate, but food miles tell us about more than just oil use and greenhouse gases. They are a useful indicator of how vulnerable our food system is to rising energy costs and other disruptions.

External costs of transportation can be difficult to quantify, and therefore rarely enter into the discussion of food systems despite their importance.

These external costs include air pollution, noise, wear and tear on roads, traffic accidents, impacts on environment and wildlife, and more. Looking at food miles is a

## ...BUT IT'S MORE THAN JUST FOOD MILES

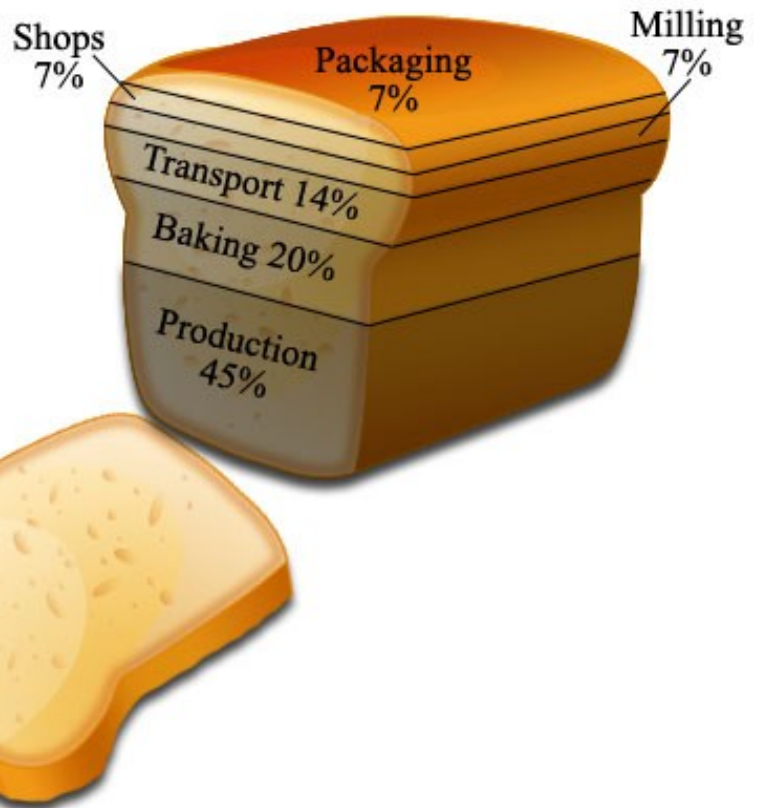


Did you know that for a can of corn, nearly a third of the energy goes to making the steel can? This emphasizes why recycling and efficient packaging are a critical part of a sustainable food system.

Also, consider that the energy used in bringing the corn home from the store may be just as important as the “food miles” energy used by the semi-truck that brings the corn to the store! This may not be surprising if you consider the average load in each vehicle: a few bags of groceries in a personal car vs. a fully loaded semi-truck. When shopping, be aware of how long you keep the freezer door open while making your food selections—that simple habit can waste a lot of energy!

The story is different for production is the big energy to farm machinery and intensive agricultural. Sustainably produced food is a crucial part of a climate-friendly system.

Home storage and preparation (refrigeration, freezing, cooking, clean-up) account for 32% of the total energy used in the United States food system—versus 14% for transportation. Consider alternatives: passive cold storage, drying food, and growing your own.



Conventionally produced red meat and dairy products are extremely resource intensive—for example, 625 gallons of water go into making one quarter-pound hamburger! By purchasing sustainably produced (grass fed, etc.) red meat and dairy products, and reducing the overall amount consumed, consumers can significantly reduce impacts on the climate and environment and contribute to a climate-friendly food system!



## CONSUMERS

- ❑ Buy local, sustainably produced foods.
- ❑ Reduce unnecessary shopping trips for just a few items—unless walking or biking of course!
- ❑ Grow your own food.
- ❑ Reduce unsustainably produced meat and dairy products in your diet and buy local, grass-fed.
- ❑ Rely less on your refrigerator or freezer by using cold storage and sustainable food preservation.



## PRODUCERS

- ❑ Sell more locally.
- ❑ Reduce fossil-fuel energy use.
- ❑ Use sustainable packaging.
- ❑ Build diversity in crops and livestock.
- ❑ Rely on biological processes rather than energy-based chemicals for fertility and pest control.
- ❑ Increase soil health and ability to hold water.

## POLICY MAKERS & FOOD SYSTEM ADVOCATES

- ❑ Provide incentives and remove unnecessary restrictions for local sustainable production and direct marketing.
- ❑ Support backyard, school, and community gardens.
- ❑ Ensure effective recycling programs for packaging and food waste.
- ❑ Educate consumers on what they can do right now to reduce climate impacts.
- ❑ Incorporate accessibility and energy-efficiency in community planning of traffic routes, grocery store locations, and farmers markets.
- ❑ Don't forget the whole food system when developing community climate action plans—the food system is usually split up in these planning processes into agriculture, waste, retail, etc.
- ❑ Capitalize on the ease with which community members can reduce their climate impacts through how they eat to engage them in other climate-friendly lifestyle changes. Being climate friendly can mean more fresh and tasty food, more meaningful work, and more closely knit communities.

## FOR MORE INFORMATION

Find online resources for this tool, as well as additional tool booklets on other community food topics, under “Food System Tools” at [www.healthycommunityfoodsystems.org](http://www.healthycommunityfoodsystems.org) or [www.HCFS.org](http://www.HCFS.org)



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