INCREASED EFFICIENCY AND CONSERVATION: WASTE NOT, WANT NOT

Global oil and food systems are both operating near full capacity, and demand is on the rise. As a result, rising prices are hurting Americans today, and the United States is at risk of food and fuel shortages in the future. To help head off an impending food and fuel crisis, it is necessary to lower the demand for oil.

The U.S. uses a lot of oil and imports most of it—almost 6 million barrels a day. Fully 70% of this oil is used for ground transportation, so Sustainable America has chosen to focus on decreasing the amount of oil Americans for transportation by 50% by 2035. **Increasing fuel efficiency** in the technologies we already use and introducing **conservation** into our daily routines can have a meaningful effect on the effort to reduce our nation's oil consumption.

UNITED STATES OIL CONSUMPTION



THE U.S. HAS 5% OF THE GLOBAL POPULATION

AND CONSUMES 21% OF THE GLOBAL OIL SUPPLY (18.8 MILLION BARRELS)

Increasing Fuel Efficiency. U.S. crude oil consumption is already going down—the most recent BP Statistical Review of World Energy shows a meaningful dip since the pre-recession levels of 2007 (down 9% in 2011 vs. 2007). The economic downturn that began in 2008, a wider adoption of fuel-efficient vehicles, and the retirement of older, less efficient vehicles have all contributed to the decline. The new fuel economy standards (CAFE standards) announced in 2012 mean automakers must continue to raise average fuel efficiency of new cars and trucks—to 54.5 miles per gallon by 2025. While CAFE standards are typically viewed through the lens of reducing emissions, we also see the new regulations as a chance to directly reduce oil usage, and thereby effecting positive change on several fronts.

High prices at the pump in recent years have had tangible effects on the daily routine of Americans, shaping attitudes and fears about the future of gasoline prices. Many consumers are adapting to smaller, more fuel-efficient cars and changing their driving habits, but there still are many ways in which Americans are wasting fuel—driving with poorly maintained cars, driving too fast, idling their engines. All this adds up, not just for the individual, but collectively for the country. According to the U.S. Department of Energy, 3 billion gallons of gasoline are wasted each year just by unnecessary idling alone, which means we're effectively throwing away money and perpetuating our dependence on foreign oil.

Conservation. Everyday Americans don't have to wait for leadership from Detroit or Washington, D.C., however, because we've got the ability to practice conservation through changes in everyday behavior. There are a number of proactive steps individuals can take to help conserve our energy resources:





SUSTAINABLE AMERICA SUPPORTS

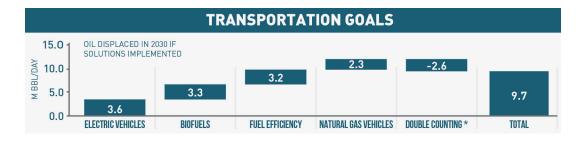
Food Waste Solutions
Alternative Farming
Precision Agriculture
Natural Gas Vehicles
Electric Vehicles
Fuel Efficiency
Advanced Biofuels

- Adopting efficient transportation modes, including biking, working from home, and taking mass transit..
- Choosing to purchase the most fuel-efficient vehicles they can afford and demanding fuel efficiency from manufacturers.
- Hypermiling and ecodriving: These techniques can drastically increase fuel
 economy of existing cars and trucks on the road. This can include proper tire
 inflation, regularly scheduled maintenance of car engines, removing excess weight
 in the car, and even include choosing NOT to completely fill the gas tank, as the
 extra weight of the fuel creates an efficiency penalty itself. Slower acceleration and
 braking, and keeping cars below 60 mph on the highway can also optimize fuel use.
- Curbing idling: When in line at a drive-through bank or restaurant, turning the engine off rather than letting it idle saves fuel and money.

Challenges. Challenges remain, even within the new CAFE standards. These regulations allow much leeway in the way that "average miles per gallon" is ultimately computed by the government. The 54.5 average mpg standard by 2025 will be computed by taking the average mpg of a given automaker's product line, meaning that automakers can still put out low mpg SUVs and trucks as long as they are offset by higher mpg vehicles. The choice of what to drive, however, will still be up to the American consumer, meaning that we ultimately have a great deal of collective power over how reliant we remain on oil going forward. With minimal effort, we can make a big difference to our pocketbooks, our air quality, our health, and our country's energy independence.

Our Proposed Solutions Include:

- **Supporting entrepreneurs** working to develop and improve technologies that improve fuel efficiency.
- **Educating consumers** about the benefits of fuel-efficient vehicles, alternative transportation methods, and fuel conservation strategies.



Sustainable America strongly believes in the power of change through action. We aim to help Americans achieve this reduction through both education and the funding of entrepreneurs who seek to solve some of the problems enumerated in this paper. We believe that market-based solutions, when combined with motivated citizens, work best to bring about change, and that together we can make a difference.