



- **Who are we?**

The Monmouth-Independence Community Climate Task Force is a group of local community members. Learn more at www.mitown-climate.org

- **Our mission?**

To educate and advise our community about the effects of climate change and provide solutions to reduce its impact.

- **What are the impacts of climate change?**

The effects of climate change can be seen in rising sea levels, hotter summers, milder winters, drought, increased flooding, and glacier melt, to name a few.

- **What can I do as an individual?**

a) *Consider installing solar panels. A typical 10 kw installation runs up to \$30000, but with tax incentives (currently 22%) costs the consumer \$20 - \$22k. The federal government, utilities and financial institutions provide financing. Currently Oregon does not offer a subsidy. Typical time to break even is 8 – 10 years. Batteries as storage are an option but not required. Excess energy produced by you will be fed back into the grid at market rates.^{[1][2]}*

b) *Purchase a hybrid or fully electric vehicle. Federal and state tax credits range from \$2500 - \$7500 for qualified vehicles.^{[3][4]}*

- **What about natural gas? Does it have a smaller carbon footprint?**

While natural gas combustion has a smaller CO₂ output than coal and diesel fuel oil, its extraction has negative effects on ground water and the environment. Natural gas is still a fossil fuel.^{[5][6]}

- **What about biodiesel (as a substitute for auto diesel or heating oil)?**

Biodiesel emits greenhouse gases (GHG) like standard diesel when burned, but the biodiesel feedstock absorbs CO₂ etc. in the growing phase, therefore offsetting the GHG pollutants from combustion.^[7]

- **What else can I do?**

a) *You live in a beautiful town. Walk when possible.*

b) *Ride your bike! If safe bike paths and trails are hard to find, talk to your city council about improvements.*

c) *Think of the insulation in your home as an “energy source”. The EPA estimates that the average homeowner could save 15% on heating/cooling costs by air sealing and adding insulation to attics, crawl spaces etc.^[8]*

d) *Increase the efficiency of your existing heating system, perhaps by installing a heat pump. PGE quotes energy savings up to 40%.^[9] The Department of Energy reports efficiency in the 50% range for an air-source unit compared to heating with electric resistance heating (baseboard).^[10]*

e) *Do not let your vehicle idle when parked.^[11]*

- **What can local governments and businesses do?**

a) *Install solar panels on new and existing city-owned structures, including schools. Replace fleet vehicles with electric alternatives as equipment depreciates.*

b) *Commit to safe and efficient bike paths and other forms of intra-city transit between Independence and Monmouth.^[12]*

c) *Reduce speed limits arterial streets to decrease fuel consumption, limit noise and increase livability.*

d) *Encourage the use of light-colored roofing materials. Lawrence Berkeley National Laboratory estimates that a premium white shingle will reflect ~ 25% more of the sun’s energy than a dark shingle.^[13] In the last year engineers at Purdue University have developed an ultra-reflective white coating that has reflectance at 98%. In some cases that can replace air-conditioning.^[14]*

References

1. <https://www.consumeraffairs.com/solar-energy/how-much-do-solar-panels-cost.html>
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