Creation Care Green Tips

Laura Raedeke, Lutheran Church of the Cross, Nisswa

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Save Money While You Help the Planet

Federal Government Programs that Help

1.  Many of us can participate in federal programs that help with **energy security and climate change investments**, which estimates show will reduce carbon emissions in the U.S. to **40% below 2005 levels by 2030** and bring energy bill relief to millions of households.  One program offers a **30% tax credit** for installing **residential rooftop solar**, while homeowners who install solar battery systems with at least 3 kilowatt-hours of capacity would also qualify for the tax credit. A typical solar panel-equipped home could keep an **excess 3,000 pounds of CO2** out of the atmosphere annually, with an average savings of **$7,000 per home.** Since they last about 25 to 30 years, they are a good investment over time.  The efficiency of the solar panels depends on your current annual energy use, the solar panel wattage, price of electricity, and materials used to make the panels.

2.  As long as our electricity comes from planet-warming fossil fuels, **air-conditioning** in an ever hotter and more densely populated world will present major problems, according to the Audubon Society.  Current AC technology not only uses high levels of electricity, the refrigerant hydrofluorocarbons (HFCs) in AC units absorb **150 to 5,000 times more of the sun's energy** than CO2 does.  By installing **heat pumps,** which use energy to pull outdoor heat indoors using compression and exchange, indoor temperatures can be increased, and then by a reverse process, be decreased to lower the temperature, making heat pumps an efficient **dual process** that saves money.  Homeowners can access a new federal program to get a **rebate of up to $8,000** to install a heat pump.  For those not qualifying for rebates, there is also a **tax credit of up to $2,000 for heat pump installation.**

3.  A study published in the journal *Environmental Science & Technology* adds to a growing body of research that links the **delivery and use of natural gas** to detrimental consequences for public health and the climate.  Harvard studies revealed at least **21 "air toxics", including the highly carcinogenic benzene,** in 99% of the samples, which are linked to certain cancers and blood disorders.  Since Americans spend **90% of their time indoors,** concentrations of some natural gas pollutants can range from two to five times higher than outdoor concentrations.  Homeowners can access new federal programs that offset up to **$840 on the cost of an electric stove,** such as a high-efficiency induction range stove, which is more energy-efficient than older electric or gas models.  According to the EPA's Energy Star program, the energy cost savings would exceed $125 million and the energy savings would exceed 1,000 GWh (gigawatt hours) if all cooktops sold in the U.S. in a given year used induction technology.

4.  According to meteorologist Paul Douglas, five separate **1,000-year rain events** have struck the U.S. in the five weeks of late July and August, while it is estimated that **42% of the U.S. is currently experiencing drought.**Extreme "weather whiplash" is being directly attributed to climate change, most of which is caused by humans, resulting in the creation of federal programs that help homeowners make their homes more energy-efficient by **installing insulation and sealing up drafts.**A rebate of **up to $1,600** for this home improvement project will not only make a home more comfortable, it can **save around 10% on annual energy bills.**This includes installing weather stripping on doors, caulking around windows, and adding insulation in the attic.  Installing new windows and doors qualifies for **tax credits of up to $1,200 a year,** and not only improves the look of a house, but also helps increase energy efficiency.