

Episode 56YW October 13, 2024. Heat Pump signs show no excuse for indoor residential wood burning.

In Episode 56YW 1 World heat pumps. 2 United States Heat Pump Rebates. United States wood pellet manufacturing is polluting. 3 Alaska Cook Inlet Nikiski. Inside Climate News. Newsletter. October 12, 2024. Veterans of Alaska's Oil Industry Look to Blaze a Renewable Energy Pathway in the State. **RAWSEP View**. The Alaska legacy of wood burning for home heating also cripples a clean energy pathway including Heat Pumps for home heating in Alaska. In RAWSEP's view Hydrogen is not the answer for clean energy. 4 California 5 Colorado 6 Connecticut 7 Florida 8 Georgia 9 Idaho 10 Illinois 11 Maine 12 Massachusetts 13 Minnesota 14 North Dakota 15 Ohio 16 Oregon 17 Texas 18 Wisconsin 19 Canada 20 Ireland 21 United Kingdom 21B United Kingdom Uxbridge and South Ruislip. Stop pushing heat pumps or face major backlash green energy magnate tells Labour. **RAWSEP View**. The energy magnate that is the subject of this article is Vince Dale who owns Ecotricity which promotes burning of biomethane made from wood or other organic solid fuels. The green energy magnate named here produces biomethane. Mimicking a burnable fossil fuel by producing a burnable fuel from wood as this green energy magnate does, does not help the environment because burning solid fuels or producing burnable fuels made from wood or other organic solid fuels that mimic liquid or gas fossil fuels pollute the air and contribute to hastening climate change. The clean alternatives to wood burning are wind and solar and when available geothermal and hydroelectric energy sent to a grid that reaches every rural area through electricity sent to Heat Pumps that work down to 40 degrees below zero and also double as air conditioners, and because of the Heat Pump's efficiency lower electric heating bills immediately. 21E United Kingdom. Increasing heat pump visibility through public signs. Nesta. We tested whether signaling buildings with heat pumps could increase their visibility to the public and inform homeowners on their property's. Increasing heat pump visibility through public signs. 22 Netherlands 23 Denmark 24 Germany 25 Albania 26 China 27 Indonesia 28 PM2.5 and Human Health. Main Content. 1 World. **RAWSEP View**. Heat Pumps are popular. Heat pumps are energy efficient. Heat Pumps despite their name provide both heating and cooling. Heat pumps run on electricity which is available in all rural areas or will be soon. The logistics of hauling wood or the logistics of having fossil fuels like liquid petroleum delivered are eliminated by using heat pumps. Heat pump usage creates a new profitable industry which provides an economical way for consumers to fulfill a basic human need of housing which is always at the optimum temperature whether warm or cool despite the weather. From the World article headline 1A Global Demand for Heat Pumps to Grow 5.6% Annually Through 2027. PR Newswire. Heat pumps provide year round comfort with both heating and cooling capabilities without the incorporation of any additional equipment. Global Demand for Heat Pumps to Grow 5.6% Annually Through 2027. MarketWatch. Heat pumps are among the most energy efficient types of HVAC equipment available a key purchasing criterion among some consumers. Heat pump. From the World article headline 1B World. Global Industrial Heat Pumps Industry Research 20242035: GlobeNewswire. Global Industrial Heat Pumps Industry Research 20242035: Opportunities in the Emergence of Asa Service Models End user Sector Coupling Data Center. 2 United States. 2A TO 2F United States Heat Pump Rebates. 2G United States Geothermal Heat Pumps. 2H United States South. Wood Pellet Manufacturing in the South Harms Communities and the Environment. Earthjustice. 2A United States. How Home Owners Can Use the Energy Efficient Home Improvement Tax Credit. NAHB. National Association of Home Builders. For improvements such as electric or natural gas heat pumps heat pump water heaters or biomass stoves/boilers the credit limit per year is \$2000. 2B United States. New company releases game changing device that promises to drastically cut your energy bill. The Cool

Down. Similar to the increasingly popular heating and cooling devices heat pump rebate for installing a modern dual use heat pump for space. 2C United States. Heat Pump Market Growth Projections to USD 102.58 Billion by 2030 openPR.com heat pumps through tax rebates and grants. Additionally the rising awareness of climate change and the urgency to reduce greenhouse gas emissions. 2D United States. New Study Identifies Central Heat Pump Water Heater Benefits. Energy Central. Interest in heat pump water heater technology is rapidly growing given its energy efficiency relative to gas fueled equipment. For apartment building. 2E United States. This game changing home upgrade could shave thousands off your energy bills. Yahoo. There is a better way and it's with heat pumps. More efficient than traditional heating and cooling systems, they can save you thousands on your home heating and cooling bills. 2F United States. 2024 sets record for certified heat pump installations. Energy Live News. This trend highlights a growing shift towards low carbon heating solutions with more homeowners and small business owners choosing heat pumps to meet. 2G United States. How the Warmth Underground Could Heat and Cool Your Home. CNET. The inherent technology behind a heat pump is pretty basic: The machine circulates some kind of refrigerant sometimes water in tubes where it. 2H United States South. Wood Pellet Manufacturing in the South Harms Communities and the Environment. Earthjustice. The industrial wood pellet industry which manufactures and exports wood pellets to burn Cutting down trees and burning the wood for energy not only. 3 Alaska Cook Inlet Nikiski. Inside Climate News. Newsletter. October 12, 2024. Veterans of Alaska's Oil Industry Look to Blaze a Renewable Energy Pathway in the State. RAWSEP View. The Alaska legacy of wood burning for home heating also cripples a clean energy pathway including Heat Pumps for home heating in Alaska. In RAWSEP's view Hydrogen is not the answer for clean energy. The idea of Hydrogen for power again is combustion of a fuel produced from fossil fuels. Why not use the truly clean energy sources of wind solar geothermal and hydroelectric exclusively? Using the word renewable should include only clean energy sources but the word has been sullied by lumping dirty energy that comes from wood and other solid fuel burning with the truly clean renewables of wind solar geothermal and hydroelectric power. According to the US Department of Energy as of 10/13/2024 Hydrogen is a clean fuel that, when consumed in a fuel cell, produces only water. Hydrogen generates energy by combining with oxygen in a fuel cell, creating electricity and water as byproducts through an electrochemical reaction; essentially, the hydrogen is split into protons and electrons at the anode, the electrons flow through a circuit generating electricity, and then recombine with oxygen at the cathode to form water and heat. When wood burns directly, it does not produce significant amounts of hydrogen; the primary products of burning wood are carbon dioxide, water vapor, and other combustion byproducts, as the heat from the burning process breaks down the wood's carbon and hydrogen components into these compounds; however, through a specific process called "gasification," wood can be converted into a gas mixture that contains hydrogen, although this is not considered "burning wood" in the traditional sense. Hydrogen can be produced from a variety of domestic resources, such as natural gas, nuclear power, biomass, and renewable power like solar and wind. RAWSEP View. Do not use wood burning or wood gasification to produce hydrogen. The Department of Energy definition of hydrogen as a clean fuel may not account for any air pollution produced from production of hydrogen from sources such as biomass. Key excerpt from the article below. Alaska is warming at more than twice the rate of the Lower 48 states but there are still climate change deniers whose motive is only profits from the energy sector whether it is clean energy or not. RAWSEP View. The cost to human health from air pollution from wood burning is not examined in this article. Excerpts edited by RAWSEP for brevity and clarity and relationship to Residents

Against Wood Smoke Emission Particulates a 501c3 nonprofit organization. Cook Inlet is a hotbed of green energy ambitions with proposals for wind geothermal tidal and hydrogen production but their success could be stymied by the fossil fuel foundation of the state's economy and politics. October 7, 2024. NIKISKI Alaska. In 2020 BP pulled out of Alaska selling off its Alaska assets and vacating a headquarters office building in midtown Anchorage. But there is a group of Alaska oil industry veterans who have joined an ambitious effort by clean energy advocates to try to rewire the state's fossil fuel mindset by tapping Alaska's massive potential for renewable power. They are developing solar projects prospecting for geothermal energy on the flanks of a volcano and designing a test of tidal power technology in Cook Inlet. The electricity produced from such projects could play an increasingly important role in the state's economy as climate change spurs a global shift away from fossil fuels. A member of that group proposes by the mid-2030s a new energy complex emerging in the town of Nikiski on the Kenai Peninsula. There he envisions harnessing electricity from the offshore wind project to make hydrogen that could be converted into ammonia a potential maritime fuel or combined with carbon dioxide to produce a sustainable aviation fuel for the cargo aircraft that stop to gas up in Anchorage on trips between Asia and the Lower 48 states. Huge financial benefits secure fierce political support for more oil production to boost flows through the Trans Alaska Pipeline even as the state has been buffeted by the impacts of climate change driven by the combustion of fossil fuels and other human activities. Alaska is warming at more than twice the rate of the Lower 48 states with reductions in sea ice putting walrus and polar bears at risk. Some western Alaska villages are threatened by thawing permafrost as well as intensified erosion amid rising sea levels. In drainages that flow south from Brooks Range more than 70 once pristine waterways have turned orange from iron and toxic metals likely flushed out in the runoff from thawing permafrost according to a study by U.S. Geological Survey and National Park researchers that found "dramatic declines" in fish abundance. Could Naturally Occurring Hydrogen Underground Be a Gusher of Clean Energy in Alaska? Yet in Alaska climate there is scant political gain to be had by citing the need to cut greenhouse gas emissions as a reason for reducing Alaska's dependence on the fossil fuels that currently generate more than 70 percent of the state's electricity. an Anchorage attorney who served on the board of the Chugach Electric Association the state's largest utility until he lost his seat in a May election. (In his previous job he initiated many conversations with climate change skeptics and was repeatedly shut down.) In rural Alaska where more than 200 communities are not connected to Alaska's transmission grid there has long been a potent economic argument for using renewables. Increasingly wind and solar projects in innovative microgrids are helping to ease the need for high priced power generation from diesel fuels that are shipped in at considerable expense. In Kotzebue, for example experiments with wind power date back to 1997 and turbines currently generate enough electricity to satisfy about 20 percent of annual power needs. Most Alaskans live in the Railbelt a swath of southcentral Alaska and the Interior that includes the state's two largest cities Anchorage and Fairbanks. renewable energy advocates make a financial case for the Railbelt utilities to diversify their power supplies. production from the Southcentral Alaska gas wells that provide most of the fuel for Railbelt power generation has fallen sharply. The North Slope has no pipeline to get it to the utilities that serve Railbelt communities an area of the state that includes Anchorage Fairbanks and the Mat Su Valley. as early as 2027 utilities expect to begin importing liquified natural gas from Canada. It would push up electricity rates that already rank among the highest in the nation and make renewables a more affordable option. "Renewables are cheaper now than natural gas and they're certainly going to be

cheaper than the natural gas prices that we are going to see in the future” said the executive director of the Renewable Energy Alaska Project in 2023 testimony to the state Senate’s Labor and Commerce Committee. Chugach Electric Association which serves the Anchorage area relies on natural gas to generate more than 80 percent of its power. Chugach is negotiating with an independent wind power producer Alaska Renewables that proposes to build a wind farm, Little Mount Susitna, 35 miles northwest of Anchorage. a “preferred plan” released earlier this year by Chugach called for acquiring more wind power as well as solar to help cut carbon emissions by at least 50 percent by 2040. “Our doors are always open to alternative energy technology and we are pursuing renewable energy projects that don’t have a negative material impact on rates or reliability ” said Chugach’s chief executive officer. the National Renewable Energy Laboratory suggests by 2040 bringing on enough renewables to meet 76 percent of their power demands. The researchers forecast that would result in \$1.3 billion in ratepayer savings compared to a continued reliance on natural gas coal and petroleum for most of the power generation. But so far the Alaska state Legislature has repeatedly balked at passing a renewable portfolio standard similar to those in 29 other states which would require utilities to reduce their dependence on fossil fuel generation. Such legislation would restrict the ability of Railbelt utilities to contract for long term imports of natural gas. In 2022, Alaska Governor Mike Dunleavy introduced one of those bills. And even as he pushes for more Alaska oil gas and coal development the governor has continued to advocate building out the state’s renewable energy resources. Republican Dunleavy is a close political ally of Donald Trump. In a July interview during the Republican convention Alaska Governor Dunleavy blasted the Biden Administration for restricting North Slope oil development and called Trump “the best president in the history of Alaska.” But Dunleavy’s embrace of renewables puts him at odds with some of Trump’s agenda. The former president and current Republican presidential candidate once attacked green energy as a scam and at a New Jersey campaign rally in May called for an executive order to halt offshore wind development. the fading gas industry could offer important assets to help launch hydrogen production. The ammonia plant could be repurposed to use hydrogen rather than natural gas. depleted oil and gas fields scattered across a broad area of the country could be the most cost effective option. So far they have not been used to hold any hydrogen but it could be an affordable storage option while others hold microbes and minerals that would degrade the hydrogen. The group want a pilot effort that would inject hydrogen in a reservoir near Nikiski and prove by 2030 that the hydrogen storage method will work. Only then could a large wind project move forward. By 2040 the large wind project could encompass more than 600 turbines spread across a 37 mile long stretch of the lower inlet. Elsewhere in the United States even without Trump in the White House offshore wind development has been buffeted by a series of setbacks. Orsted a Denmark based company abandoned plans to build two wind farms off of New Jersey as surging equipment costs eroded the projects’ profit potential. Earlier this year a New York state authority citing “technical and commercial complexities” opted not to finalize agreements for three offshore projects. On July 13 a turbine in the Vineyard Wind project off of Massachusetts suffered a major failure with a blade dropping into the ocean and some debris washing ashore on area beaches. Offshore wind development also has often faced powerful pushback. Opposition has included East West and Gulf coast fishermen who are concerned about being displaced from some of their traditional fishing grounds. In Oregon two federal offshore auctions drew strong opposition and concerns from Oregon Governor Tina Kotek. Initially scheduled for October 15 they were canceled in late September as most eligible bidders opted not to participate. Birds are another concern. For the past two summers Geo

Alaska has financed crews who have gathered data about the geothermal potential of Augustine Volcano on an island in the Cook Inlet. Turning the Tide on Renewable Electricity. The Cook Inlet tides may be able to provide another potentially huge renewable energy resource. They are some of the strongest on the planet and ranked as the nation's top tidal energy prospect in a 2021 study by the National Renewable Energy Laboratory.

4A California. California to Roll Out Home Energy Rebates Program Rigzone. The other appliances covered include heat pumps heat pump water heaters and electric cooking appliances all needing to be Energy Star certified.

4B California. New Federally Funded Residential Energy Rebate Programs Launching in California. Renewable energy magazine. Owners and agents of multifamily buildings may apply for rebates on heat pump heating and cooling units and other electrical appliances and equipment.

4C California. California launches \$80 million rebate program to electrify multifamily buildings homes. YouTube. rebates for energy efficient upgrades such as electric stoves and in unit heat pumps. <https://trib.al/h8HrJTf> KTLA 5 News.

5A Colorado Grand Junction. Smoke in the Grand Valley causes concern for officials AOL.com McTabi said "The biggest thing we worry about is something called PM 2.5 or particulate matter 2.5. It's fine particles in the air that are two point five micrometer size.

5B Colorado Pueblo. Stage 1 fire restrictions ordered for the City of Manitou Springs. KOAA. Private residential charcoal grills smokers woodburning fireplaces. Fireplaces, and woodburning stoves within private residences that. fire rings within the city's RV and camping parks; Private residential charcoal grills smokers woodburning fireplaces and fire pits are allowed.

6 Connecticut. **RAWSEP View.** Propane and natural gas are cleaner burning fuels than indoor residential wood burning for home heating. For that reason they can be considered relatively clean bridges to the truly clean energy home heating source of Heat Pumps that run on electricity. One other drawback of propane and natural gas is that there can be explosions or fires from natural gas or propane in some settings. Heat Pumps do not cause explosions or fires. From the article headline. Connecticut. Chief: Man dog flee East Granby home after propane tank catches fire The Middletown Press. Excess pressure from the pile of burning wood opened the relief valve on a 500pound propane tank sitting nearby leaking a cloud of gas that.

7 Florida. Inside Climate News. Newsletter. October 9, 2024. In Florida Senate Race Two Candidates With Vastly Different Views on the Climate. **Excerpts edited by RAWSEP for brevity and clarity and relationship to Residents Against Wood Smoke Emission Particulates a 501c3 nonprofit organization.** Incumbent Rick Scott a Republican reportedly banned the words "climate change" from state agencies as governor. Democrat Debbie Mucarsel-Powell favors climate resilient infrastructure. October 9, 2024. Sen. Rick Scott Republican of Florida faces former U.S. Democratic Representative Debbie Mucarsel-Powell a in Florida's Senate race. ORLANDO Fla. Florida's narrowing Senate race between two candidates with vastly different views on the environment and climate is shaping up to be consequential as each party pursues control of the chamber in November. The incumbent Rick Scott a Republican faces a formidable challenge from former U.S. Rep. Debbie Mucarsel-Powell a Democrat. Various recent polls indicate the contest is tightening. In one poll last month Scott led Mucarsel-Powell by a mere percentage point. 45 percent of would be voters favored Scott compared with 44 percent for Mucarsel-Powell according to the Sept. 30 poll from Victory Insights. Eleven percent were undecided. At stake is U.S. climate policy including the Inflation Reduction Act the \$370 billion package President Joe Biden signed into law in 2022. The monumental measure includes clean energy incentives that former President Donald Trump has vowed to repeal if reelected. One recent survey from Florida Atlantic University found that 90 percent of respondents believed climate change was real compared with 70 percent of Americans who answered similarly on a separate Yale

University survey. That may be because Florida is uniquely vulnerable to the consequences of climate change especially hotter temperatures rising seas and more damaging storms. In the last seven years the state has weathered six major hurricanes. Michael which made landfall in 2018 in the Panhandle was the first category 5 storm to strike the continental United States since Andrew in 1992. Ian which hit southwest Florida in 2022 was the costliest hurricane in state history and third costliest on record nationwide after Katrina in 2005 and Harvey in 2017. It will be some time before the scope of Helene's impact is fully understood. This week the state braced for Milton predicted to hit the Florida peninsula's Gulf coast. Recent major hurricanes also include Irma in 2017 and Idalia in 2023. "Climate policy is important to Florida. We're the canary in the coal mine and we're the most sensitive to rises in sea level and hurricanes. This is not just a Florida issue. The whole Gulf Coast is sensitive to this and the whole Atlantic Coast is sensitive to this." 8 Georgia Brunswick. Gas logs from Arco Hardware keep home fires burning News thebrunswicknews.com The Brunswick News. Traditional woodburning fireplaces offer a certain coziness factor but they also come with maintenance. If your home has a gas fireplace or you want. 9 Idaho Boise. 'Winter is coming': Stock up on free firewood at the Boise National Forest. **RAWSEP View.** Wood burning is not a necessity for home heating. Wood burning is expensive in comparison to the clean alternatives of wind and solar energy and now with Heat Pump rebates added Heat Pumps are cheaper than wood burning for home heating. This is an irresponsible government policy to distribute wood for burning. Excess wood can be composted for usable soil or used for furniture or home building to name only a few non burning uses for wood. This is an irresponsible article which promotes wood burning for no reason. Common sense is not offered in this article. The reality of air pollution from wood burning is ignored in this article. From the Article Headline. Idaho. KTVB. Need to light the biggest fire the North has ever seen? The Cascade Ranger District is offering free personal use fuelwood permits. 'Winter is coming': Stock up on free firewood at the Boise National Forest KTVB If you have a fireplace or wood burning stove firewood is a necessity and it can be expensive. 10 Illinois. Com Ed launches heat pump technology resource for customers Daily Energy Insider. Officials said a heat pump acts as a reverse air conditioner both heating and cooling a resident's home throughout the year. Heat pumps work by. Illinois. Fire Prevention 247 Prepare for cold season Positively Naperville. Let's start with our smoke and carbon monoxide alarms. I am sure you If you've got a wood burning fireplace hire a professional chimney. 11 Maine Portland. How much money has been spent subsidizing heat pumps in Maine? The Portland Press Herald. Heat pumps use electricity to heat and cool buildings often replacing oil or gas furnaces that contribute to greenhouse gases. The pumps extract heat. Sun Journal. heating despite subsidies to expand heat pump usage. heat pumps without tapping an Efficiency Maine rebate. Maine. Maine's Reliance on Heating Oil is Sharply Declining Office of Governor Janet T. Mills. Maine.gov I promised to change that in part by helping Maine people transition to heat pumps instead of costly inefficient and harmful heating oil. In 2019. Ocean Renewable Power Company a Maine based company with a branch office in Anchorage used federal funds to install a small Kvichak River turbine that can provide at peak production half the power consumed by the southwest Alaska village of Igiugig. 12 Massachusetts. Endless Energy Recognized As Top Ductless Contractor in Marlborough Massachusetts. Morningstar. rebates via the Mass Save heat pump rebate program. "Hiring the right ductless installer has never been more important. People want to enjoy all. Massachusetts. Solar Is Good For Nantucket. Nantucket Current. heat pump which provides us with heat and air conditioned bliss and also delivers a hefty rebate through Mass Save. When our gas stove dryer. 13 Minnesota. Bogus Lake wildfire burning in Superior

National Forest. Quetico Superior Foundation. Overview of wildfires within the BWCAW. The Wood Lake wildfire discovered on Tuesday September 10 2024 remains active. Covering 34 acres it is 50. The ban prohibits people from lighting building or using campfires charcoal grills barbecues and wood or coal burning stoves. However gas or. Minnesota. Wildfires burn in Boundary Waters amid high fire danger restrictions. KAXE. A firefighter working the Wood Lake Fire on September 13. 2024. Contributed by U.S. Forest Service via Inci Web. Minnesota. Burning restrictions expand to Koochiching northern St. Louis counties. Northern News Now. You can see current. 14 North Dakota Minot. Morton County issues fire emergency and burn ban. KX News. The declaration bans open burning which includes campfires controlled burns i.e. wood piles tumbleweeds tree piles etc. cropland/agricultural. 15 Ohio. State fire marshal lifts Ohio burn ban after recent rain. The Columbus Dispatch. However there are still restrictions on burning. Under Ohio law lighting fires to burn wood brush weeds grass or "rubbish of any kind" in. Pennsylvania Homer City. DEP TO HOLD INPERSON AND VIRTUAL LISTENING SESSIONS. WCCS AM1160 & 101.1FM heat pumps for space heating and cooling heat pump water heaters clothes dryers and electric stoves cooktops ranges or ovens. Rebate fun. 16 Oregon. Air quality alert issued for Klamath County oregonlive.com Avoid using woodburning stoves and other sources of indoor smoke if possible." Air quality alerts: Recommendations from NWS. When an air quality. 17 Texas Kilgore. Global Demand for Heat Pumps to Grow 5.6% Annually Through 2027. kilgorenewsherald.com Kilgore News Herald. Heat pumps provide year round comfort with both heating and cooling capabilities without the incorporation of any additional equipment. 18 Wisconsin. Wisconsin's severe drought leads to burn bans in over half the state's counties Fox 11 News. Over half of Wisconsin counties hit with high fire danger permits halted. by Savannah Wood FOX 11 News. Friday October 11th, 2024. Updated. Burn bans in place in several Northeast Wisconsin counties as high fire danger persists. FOX 11. Burn bans in place in several Northeast Wisconsin counties as high fire danger persists. by Savannah Wood FOX 11 News. Fri October 11th, 2024. 19 Canada British Columbia. Smoke and fire coming soon to Lake Country News kelownadailycourier.ca Kelowna Daily Courier. Pile burning of dead wood and brush helps reduce the risk of future forest fires. The exact timing of the controlled burns which could start as. 20 Ireland. Limerick Council challenges Microsoft over what it claims is an inaccurate air quality report. The Irish Independent. PM 2.5 levels are low. The council cannot verify measurements reported by Microsoft and the data displayed in the MSN Weather Maps is not a. Clarification on Air Quality Reporting for Limerick City. Limerick.ie PM 2.5. We would like to clarify that the air quality in Limerick City is good based on the Air Quality Index for Health and PM 2.5 levels are low. Ireland. No-smoke coal, please! Meath Live. From October 2022 new regulations were introduced to improve air quality and public health by banning the sale of bituminous smoky coal wet wood. 21A United Kingdom. **RAWSEP View**. An alternative to looking at a wood burning stove is looking at an electric stove hat mimic the look of wood burning. From the article headline. Everyone needs this 2p an hour heating item to keep their homes warm this winter. The Mirror. Electric stove heaters can bring rustic charm without the hassle mimicking the look of a traditional wood burner without the smoke fumes. Promoted. 21B United Kingdom Uxbridge and South Ruislip. Stop pushing heat pumps or face major backlash green energy magnate tells Labour. **RAWSEP View**. The energy magnate that is the subject of this article is Vince Dale who owns Ecotricity which promotes burning of biomethane made from wood or other organic solid fuels. The green energy magnate named here produces biomethane. Mimicking a burnable fossil fuel by producing a burnable fuel from wood as this green energy magnate does, does not help the environment because burning solid fuels or producing

burnable fuels made from wood or other organic solid fuels that mimic liquid or gas fossil fuels pollute the air and contribute to hastening climate change. The clean alternatives to wood burning are wind and solar and when available geothermal and hydroelectric energy sent to a grid that reaches every rural area through electricity sent to Heat Pumps that work down to 40 degrees below zero and also double as air conditioners, and because of the Heat Pump's efficiency lower electric heating bills immediately. The Labour government's push for clean energy Heat Pumps as the logical alternative to air polluting wood burning is common sense in RAWSEP's opinion. That polluting energy methods can be labelled green and or environmentally friendly just because they originate from wood is a travesty in RAWSEP's opinion, and is an example of deceptive greenwashing of the air polluting biofuel called biomethane. From the article headline. The Guardian. Heat pump program. If you look back at the Ulez byelection and the fuss made about it in elements of the press imagine a heat pump program. Vince, whose criticism of heat pumps has proved divisive among environmentalists, said mass use could bring a bigger political backlash than London's expanded ultra-low emission zone (Ulez), which led to a surprise byelection defeat for Labour last year in Uxbridge and South Ruislip. Additional press. Heat Pumps. RAWSEP View. Key excerpts in rebuttal of the Ecotricity magnates view are. new specialist heat pump tariffs could make them cheaper to run and environmentalists claim that the amount of land needed to produce enough green gas would be unrealistic, lead to food insecurity and damage biodiversity. Excerpts edited by RAWSEP for brevity and clarity and relationship to Residents Against Wood Smoke Emission Particulates a 501c3 nonprofit organization. October 13, 2024. The government risks a huge political backlash if it keeps pushing the public to install heat pumps to replace their boilers, one of Britain's leading green entrepreneurs has warned. Dale Vince, a major Labour donor and renewable energy advocate, called on Keir Starmer to rethink national programs, championed by Boris Johnson, pushing the technology. Vince argued that Whitehall should explore alternatives to the devices, which he said were expensive, caused serious disruption and could end up increasing energy bills for some people. Vince, whose criticism of heat pumps has proved divisive among environmentalists, said mass use could bring a bigger political backlash than London's expanded ultra-low emission zone (Ulez), which led to a surprise byelection defeat for Labour last year in Uxbridge and South Ruislip. Critics such as Vince state that heat pumps could increase bills because the electricity used to run them costs far more than gas. A study by the independent Energy Saving Trust put the cost at £20 a year more than using a new A-rated gas boiler. However, new specialist heat pump tariffs could make them cheaper to run. Vince claimed that he was speaking in the "national interest" in criticizing heat pumps. He proposes an alternative, green gas, or biomethane, made from organic material, which his company Ecotricity develops. Other environmentalists claim that the amount of land needed to produce enough green gas would be unrealistic, lead to food insecurity and damage biodiversity. A comment in the Observer on this original Guardian article. Excerpts edited by RAWSEP for brevity and clarity and relationship to Residents Against Wood Smoke Emission Particulates a 501c3 nonprofit organization. The Observer. 12th October 12, 2024. The drive to install heat pumps risks the loss of 6,000 manufacturing jobs, a report has warned. Britain's boiler industry is in jeopardy as the Government phases out the use of gas for home heating, according to the Institute for Public Policy Research (IPPR). The Government wants the majority of homes to be run on heat pumps by 2050, to meet its net zero targets, replacing gas boilers in some 20 million homes. But two-thirds of heat pumps installed in homes are currently imported, compared with less than half of new gas boilers. "The UK stands out in Europe for its large gas boiler market and its related

manufacturing base,” said an Institute for Public Policy Research IPPR associate fellow. “However, with gas boilers being phased out to meet net zero targets, this dominance is nearing its end.” The UK gas boiler industry is worth some £1.5 billion, accounting for nearly 23 per cent of the European market, but Britain ranks just 12th for heat pump manufacturing. A comment in the Observer on this original Guardian article. **Excerpts edited by RAWSEP for brevity and clarity and relationship to Residents Against Wood Smoke Emission Particulates a 501c3 nonprofit organization** *The Telegraph*. October 10, 2024. United Kingdom. Warning as new rules could see homeowners face £300 fine in their bid to keep warm. MSN. Certain appliances that burn solid fuel such as wood burning or multifuel stoves can release harmful gases. smoke into the atmosphere. UK's new log burner regulations for 2024 and what you need to know MSN. With winter just around the corner it's important to abide by the UK woodburning stove laws and re. Woodburning stoves a. 21C United Kingdom. **RAWSEP View.** Another baseless critique of Heat Pumps from the Ecotricity camp follows. From the article headline. Net zero heat pump drive 'will cost 6,000 jobs' MSN. The drive to install heat pumps risks the loss of 6,000 manufacturing jobs a report has warned. Britain's boiler industry is in jeopardy as the. 21D United Kingdom. **RAWSEP View.** More reasons to deploy clean energy Heat Pumps from two UK articles following. Heat pumps are more energy efficient, cheaper and not volatile like natural gas or biomethane. From the articles. Thousands of jobs 'at risk' if transition from boilers to heat pumps doesn't speed up. Daily Record. Heat pumps are more energy efficient than gas boilers can lower energy bills and enhance energy security by reducing reliance on volatile gas. United Kingdom. UK 'risks job losses' due to go slow on heat pump manufacturing. edie. A new industrial strategy for heat pump manufacturing in the UK is vital to achieving green economic growth a new report from the Institute for. 21E United Kingdom. Increasing heat pump visibility through public signs. Nesta. We tested whether signaling buildings with heat pumps could increase their visibility to the public and inform homeowners on their property's. Increasing heat pump visibility through public signs. **Excerpts edited by RAWSEP for brevity and clarity and relationship to Residents Against Wood Smoke Emission Particulates a 501c3 nonprofit organization.** We tested whether signaling buildings with heat pumps could increase their visibility to the public and inform homeowners on their property's suitability for the heating technology. October 10, 2024. Myths and low awareness around heat pump suitability are common among homeowners, which can deter them from adopting low-carbon technologies. Typically, heat pumps are hidden at the back of properties and people often aren't aware of heat pumps on their streets. We decided to test whether using signage or a marker to indicate the presence of heat pumps could increase their general visibility to the public and inform homeowners on whether their property type could be suitable for a heat pump. In addition, people often visit buildings that are heated using heat pumps. Signaling that these buildings use this heating technology could raise public awareness and showcase their capacity to heat a wide range of buildings, reinforcing their viability as a potential universal heating solution. We identified three research questions to explore over the course of four weeks. Question 1: Do heat pump owners want signs on their property? We sent a survey to over 200 Visit a heat pump hosts to gain a better understanding of heat pump owners' preferences towards having a sign on their property. Based on responses from 49 hosts, we found that: 65% of homeowners were positive towards the idea of a heat pump sticker on their property. 22% of homeowners most favored location for a sign was in their window. 49% of homeowners were comfortable with a QR code on the sign to link to heat pump information online. temporary signage was preferable for 39%, more often than permanent signs. 69% of homeowners were more positive about an installer

putting up a sign rather than themselves. 76% of homeowners did not consider an incentive necessary. eight free text responses highlighted home security concerns from indicating the presence of a heat pump on their property. We used these insights to design a range of prototype signs. Then we re-contacted our Visit a heat pump hosts to see if any would be willing to have a sign on their property. We sent 27 willing hosts a design to print at home and place in their preferred location. After one week, we sent a follow-up survey to assess their experience and whether the signs had any impact on people enquiring about their heat pump. We received 12 responses and found that homeowners generally had a positive experience. The signs provoked conversations with neighbors, were read by passersby, and sparked the interest of visitors. Only one homeowner had a negative experience, due to a neighbor believing the sign was a safety requirement for heat pump owners. The QR codes were also scanned 34 times (although some of these will have been from the homeowners themselves). Question 3: Is it possible to design a sign that is clearly identifiable by the public? We conducted eight semi-structured interviews with registered participants from our research pool. Showing our prototypes, we asked them for their thoughts on the design, whether they would notice these signs at their neighbors or generally on their street, and whether they would ever consider placing one on their property. All interviewees found that the purpose of the prototypes was intuitive and clear. They were more divided on the designs, preferring greener branding and URL addresses or QR codes for accessibility. Participants were happy to have the signs put up in their area, although there were mixed preferences between lamppost signs, installer signs, or signage by a homeowner. When asked about signage on their property responses were still positive, but many expected an incentive in return for what they viewed as an advertisement. Interestingly, a small number of interviewees thought that the signs could increase property value, expressing interest in the potential for estate agents to highlight the heat pump if they were going to sell their property. Conclusion. Our results revealed that signage indicating the presence of heat pumps has value, so we will continue exploring how this can increase heat pump visibility. We also found that the idea is malleable, as the concept can be repurposed to suit the needs and wants of different audiences. Although speed testing is inherently rushed and messy, we think that this idea could be taken forward or repurposed in four ways: Homeowners: our findings suggest that they are a key stakeholder group. Further piloting should explore ways to engage a wider population beyond Visit a Heat Pump hosts, considering the use of incentives and improvements to the sign design. Installers: based on this pilot, they are a key stakeholder group to engage. Further testing should improve the design, with support from heat pump installers, test the signs in 'real-life' with them, and onboard new installers. Lamppost signs: we found that people respond well to signs posted in their area rather than on private properties. Further piloting should explore different ways to use them to help communities decarbonize, for example in our own coordinated switching project. Retail (supermarkets): this route has value, especially since it appears to align with actions supermarkets are already taking. Further piloting should engage more closely with willing supermarkets and use this experience to create a blueprint that could be trialed with other retailers. 21F United Kingdom. UK must realize its 'huge potential' to make heat pumps for the switch to clean home heating. IPPR. Heat pumps are a crucial element of the UK's just transition to decarbonize residential heating moving away from gas boilers. They are more energy. 21G United Kingdom. WEB. Heat pump deployment: September 2024 Official statistics announcement GOV.UK Heat pump deployment: September 2024. Quarterly statistical release on the number of heat pumps installed in the United Kingdom. From: Department. 22 The Netherlands. Run on heat pumps before

subsidy gets cut. NL Times. The demand for heat pumps jumped after the government announced on Budget Day that it would cut the subsidy next year. The installation sector is. 23 Denmark. Air to water heat pump for solar assisted district heating. PV Magazine. Researchers in Denmark have found that using a largescale air to water heat pump in solar district heating may significantly reduce its levelized. 24 Germany. Failing to replace gas boilers with heat pumps 'puts jobs at risk' Insider.co.uk Workers assemble heat pumps for residential buildings in Germany. Thousands of manufacturing jobs are at risk unless a new strategy is put in place. 25 Albania Kosovo. Study: Small particles in the air can trigger sudden heart attacks. Telegrafi. The data showed that daily concentrations of PM 2.5 averaged 18.44 micrograms per cubic meter. Testing a hypothetical reduction in air pollution. 26A China. Interannual changes in transboundary air quality from KORUSAQ 2016 to SIJAQ 2022. ScienceDirect.com PM2.5 reduction in East China leads to a decrease in transboundary transport of air pollutants to downwind areas. Emission reductions in upwind. 26B China. Impact of urbanized atmosphere land processing to the near ground distribution of air. ScienceDirect.com PM2.5 concentration in Northeast China Li et al. 2020b. In an air pollution event in January 2019 the contribution of transport from the. 26C China. Consecutive Northward Super Typhoons Induced Extreme Ozone Pollution Events in Eastern China. Nature. PM2.5 pollution. A detailed analysis of PM2.5 is provided in Supplementary Text 1. In addition to increasing O3 concentrations typhoons may also. 27A Indonesia. Indonesia biomass drive threatens key forests. UCA News. Push for woodburning energy drives deforestation in key habitats for endangered species like orangutans says report. Indonesia. Indonesia's woodburning energy push fuels deforestation crisis. TRT World. Producing the wood pellets and chips used for "cofire" coal plants also risks driving deforestation with natural forests cut down and replaced by. Indonesia biomass drive threatens key forests. UCA News. Push for woodburning energy drives deforestation in key habitats for endangered species like orangutans says report. 28 PM2.5 and key drivers. Key Drivers in Cutting Black Carbon Emissions Mirage News. As a major component of fine particulate matter PM2.5 BC also adversely affects human health. Multiple epidemiological studies have shown that.