

8/12/19 - Correspondence submitted by Dr. Ken Miller and distributed to RCEA Board of Directors and Community Advisory Committee Members.

Warren Buffett, says: “We get a tax credit if we build a lot of wind farms. That’s the only reason to build them. They don’t make sense without the tax credit.”

Mayors for Solar Energy (from all 50)

We, the undersigned U.S. Mayors and local officials, resolve to make solar energy a key element of our communities' energy plans.

Accelerating the growth of solar will reduce pollution while revitalizing our communities by creating jobs and keeping energy dollars in our local economies. Expanding solar power helps residents and businesses benefit from lower energy costs while providing more local control of energy and improving our communities' resilience.

Therefore, solar energy can and should be a much larger part of our energy mix than it is today. The U.S. has the potential to produce 100 times more solar power than the total amount of energy we consume each year. We must continue to harness this vast source of clean energy for the benefit of all of our citizens.

As local leaders, we know that our communities are particularly well-suited to adopt solar power. Cities and towns are natural centers of electricity demand, have the rooftops and infrastructure needed for installing solar panels, and can craft policies to help residents and utilities make the switch to solar power. With a concerted effort underway on the state and federal levels to limit the growth of solar by fossil fuel special interests, communities like

ours across the country need to act quickly to continue our progress toward renewable energy.

By signing this statement in support of solar, we commit to supporting efforts to advance solar energy in our local communities, states, and the nation.

Signed:

California

Rochelle Nason, Mayor, Albany

Jesse Arreguin, Mayor, Berkeley

Glenn Sylvester, Former Mayor, Daly City Catherine

Blakespear, Mayor, Encinitas

Lily Mei, Mayor, Fremont

Harvey Rarback, Mayor, Half Moon Bay

R Rex Parris, Mayor, Lancaster

Skylar Peak, Former Mayor, Malibu

Clyde Roberson, Mayor, Monterey

John F. Johnston, Mayor, Ojai

Heidi Harmon, Mayor, San Luis Obispo Ted Winterer,

Former Mayor, Santa Monica Glenn Hendricks, Former

Mayor, Sunnyvale Sam Liccardo, Mayor, San Jose

<https://environmentamerica.org/feature/ame/mayors-solar-energy>

Decentralized Microgridding Can Provide 90% of a Neighborhood's Energy Needs, Study Finds

"The new approach could even pave the way for 100 percent self-sufficiency in power, heat, and water."

https://www.vice.com/en_us/article/vbngmd/decentralized-microgridding-can-provide-90-of-a-neighborhoods-energy-needs-study-finds

The report describes microgrids as the end result of the combination of several technological trends, namely, rooftop solar, electric vehicles, heat pumps and batteries for storage. The key is that these technologies are decentralized—they can easily be owned by consumers and cooperatives in local systems.

Currently, he said, the way in which we use these technologies is, in his words, “dumb.” We simply attach solar panels, heat pumps, and electric vehicles to the grid for their own separate purposes. This dramatically increases the load on the local grid, requiring costly infrastructure upgrades to sustain the system.

This is where what the Metabolic report calls “SIDE” systems come in – standing for “Smart Integrated Decentralised Energy.” SIDE systems provide a way to intelligently integrate different technologies to balance supply and demand locally in a way that prevents high costs.

“This integration should be done through an intelligent energy management system, that will charge your car when the sun is shining, and export excess electricity production to your neighbour's heat pump: a smart-grid,” said de Graaf. “Ultimately, this smart, decentralised integration democratises energy production and consumption, and

allows consumers and cooperatives to take control of their own energy supply, which will help facilitate the renewable energy transition from the bottom-up.”

These would entail a whole suite of interconnected technologies: a community battery storage system, smart meters which actively monitor the entire system, air-to-water heat pumps intelligently managed according to actual demand, local energy trading between the houses so they can exchange surplus, more electric vehicles, the use of Combined Heat and Power (CHP) units which generate both heat and electricity using biomass, and the installation of a local district heating network to distribute heat to multiple houses.

Applying this model means it is entirely possible to overcome the current incapacity of the grid infrastructure—which in the Netherlands can handle the input of only 25-30 percent of intermittent renewable energy. Using SIDE systems, this percentage can be increased dramatically to as much as around 50-75 percent, de Graaf explained.

“With the unstoppable emergence of electric vehicles, solar panels, heat pumps and batteries, we will start seeing more and more of these microgrids emerge,” he said. “The decentralisation of our energy system is therefore an unstoppable force that will have a big impact on our renewable energy future.”

Still, this could well represent only the beginning of what is possible. The end-goal of the Metabolic team’s technology research is a concept called “Smarthoods.”

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Resilency Hot Spots

During extreme weather, low-income communities tend to suffer the most.

In the case of an evacuation, residents may not have a car or a safe place to go. They may live in older homes that are more easily damaged. And with less money, it’s harder to recover.

Kristin Baja of the Urban Sustainability Directors Network says supporting these communities should not wait until disaster strikes.

Baja: “How are we actually helping communities year-round? Because resilience is not just in the event of a shock. It’s all the stressors we’re dealing with every day that are then exacerbated by that shock.”

Baja’s group is working with several cities, including Washington, D.C. and Miami, that are interested in developing what she calls “resilience hubs.”

The idea is to retrofit trusted spaces – such as community centers – with solar panels and battery storage. In an emergency ...

Baja: “There’s extra food. There’s extra water. There’s a location to go to charge phones or to communicate with folks.”

The rest of the year, these spaces can serve the community in other ways – for example, by offering job training workshops or health services.

She says it’s a model for strengthening communities before, during, and after a disaster.

News Release

Contact

[Emma Searson,](#)
[Josh Chetwynd,](#)

[More than 250 mayors nationwide sign letter calling for increased solar power](#)

Municipal leaders from all 50 states support more clean energy from the sun

For Immediate Release.

Wednesday, July 24, 2019

Boston, Mass. -- A bipartisan group of 252 U.S. mayors, representing every state and one territory, released a [letter](#) today through Environment America Research and Policy Center backing the use of solar energy. Elected officials who signed on resolved “to make solar energy a key element of our communities' energy plans,” according to the letter.

The diverse group of [Mayors for Solar Energy](#) cited a number of different solar energy advantages in explaining their commitment to this cause. For example, elected officials in coastal cities like Fort Lauderdale, Fla., which has seen [extreme weather and flooding](#) in recent years, understand the vital role emissions-free renewable energy plays in combating global warming.

“As a climate Mayor, I recognize the City of Fort Lauderdale has to do more than just adapt to sea level rise,” said Fort Lauderdale Mayor Dean Trantalis, who was one of 21 mayors from Florida to sign on to the letter. “We have to proactively address the root cause of climate change by reducing our carbon footprint. Solar energy is an important part of that equation -- and for good reason. Fort Lauderdale is located in the Sunshine State where we are blessed with 246 sunny days each year. This makes our city a natural location to capitalize on the value of solar energy.”

The Mayors for Solar Energy are also supporting solar energy development for social and economic reasons. Across the country, solar energy delivers a wide [variety of benefits](#), from supporting a more efficient and resilient electric grid to providing local jobs.

“Solar power provides us with an opportunity to let the sun drive another component of our economy, as we work toward a cleaner, more sustainable, and energy efficient future,”

said Mayor Trantalis.

Halfway across the country, Bloomington, Ind., Mayor John Hamilton is also a solar supporter for a variety of reasons.

"In Bloomington, the vigorous addition of solar capacity in city facilities and at residences is one notable way we're working to reduce our carbon footprint and our reliance on fossil fuels -- while at the same time advancing economic growth and social equity," said Mayor Hamilton.

Since the letter was first released in December 2017, it has grown to reflect the [broad bipartisan national support](#) for solar energy. The list of 252 mayors is diverse, representing cities of all sizes and politics. For instance, Democratic Mayor Muriel Bowser of Washington D.C. recently signed onto the letter, as did Republican Mayor Jeff Longwell of Wichita, Kan. -- a historically Republican-dominated state.

This letter comes amidst a surge in state and local renewable energy leadership. A wave of commitments to 100 percent clean renewable energy have been sweeping across U.S. cities and [states](#) nationwide. More than [100 U.S. cities and counties](#) have already committed to repowering themselves with 100 percent renewable energy, including major cities such as [Los Angeles](#), [Chicago](#), and [Salt Lake City](#). And, to make ambitious goals a reality, cities are using smart local policies and public initiatives to capture more clean, renewable energy from the sun.

The City of Bloomington, for example, has installed solar panels at more than 30 municipal properties. And, Mayor Hamilton is proud of the city’s group-buy program, a partnership with a local nonprofit organization that makes it more affordable for residents to go solar by offering group discounts. In Fort Lauderdale, improved permitting processes for rooftop solar installations through the national [SolSmart program](#) and a Property Assessed Clean Energy (PACE) financing program are key to helping more Floridians go solar.

“Facing a lack of federal leadership on climate and energy, we’re seeing leaders at the community level step forward,” said Emma Searson, Go Solar campaign director with Environment America Research and Policy Center. “Cities are leading the way in transforming the energy that powers our lives and communities, and solar energy provides an ideal opportunity for them to shine.”

“In New Orleans, officials are placing solar panels on a local streetcar barn as part of a citywide effort to utilize [publicly-owned buildings to generate solar power](#). The new 300-kilowatt system feeds directly onto the local electric distribution grid to benefit customers. In other solar news, over 250 US mayors, representing both major political parties, every state in the country and one territory, have signed onto a letter calling for [increased solar power in their communities](#).”

SIERRA CLUB WINDPOWER SITING GUIDE

Generalizing wind can miss the critical issue of siting, which is THE issue here

The Sierra Club guide is clear:

•The Sierra Club opposes development in ...*critical habitat and designated habitat recovery areas for wildlife, and areas of cultural significance, sacred lands, and other areas that have special scenic, natural or environmental value. In these areas, it is inappropriate to build wind turbines, roads, transmission lines, or any other structure related to wind development .*

MOST APPROPRIATE SITES The Sierra Club will usually support wind development in places that are Most Appropriate:

- Agricultural land - farms, ranches, grazing lands (considering impacts on rare grassland birds, if any)
- **Land that has been substantially disturbed, or where transmission lines exist already**

MORE APPROPRIATE SITES The Sierra Club should support wind development with appropriate mitigation techniques in places that are More Appropriate:

- **Sites near population and electricity consumption centers.**
- Sites where credible environmental review concludes siting will result in acceptable wildlife/habitat impacts. Sites with extremely good wind potential, without strong negative concerns

LESS APPROPRIATE SITES The Sierra Club may oppose wind development in places that are Less Appropriate, unless mitigation techniques can adequately minimize environmental impacts:

- **Natural areas where damaging road and/or transmission capacity must be installed**
- **Projects located so as to significantly impair important scenic values**

NOT APPROPRIATE SITES The Sierra Club will usually oppose wind development in areas that are Not Appropriate (all the categories below include prior-designated or prior-proposed areas):

- **Critical habitat for Rare, Threatened or Endangered Species or habitat for indigenous species critical to a region or state's biodiversity**
- <https://www.sierraclub.org/policy/energy/wind-siting-advisory>

TerraGen's Proposed Project Violates All Of These Prohibitions

If we want clean wind power, we can buy it from the grid from established sites where the impacts have already occurred, preferably from re-powered sites, and avoid TerraGen's biocide .

You are being led by anachronism and high-priced PR: 19 century technology, with gears and wheels and oil and constant maintenance, serving centralized interests. Solar PV is modern, generating electricity the way we, plants and other animals do, by ionic exchange, sharing our energy wealth.