Clean energy crucial for California

Look around lately and it’s hard to ignore evidence of chaos fueled by our changing climate.

From the barrage of hurricanes in the Atlantic to the raging wildfires and heat waves throughout the West, climate change is here already and it refuses to be ignored. In the last week, everyone from Miami’s Republican mayor to Pope Francis has affirmed the need for swift action.

*Clean economy jobs rose by 18 percent in 2015, six times as fast as job growth overall in California.*
It’s painfully clear we can’t count on the Trump administration. That’s why an intrepid majority of California lawmakers needs to claim the mantle this week by passing SB 100, which would set the state on a path toward 100 percent clean energy by 2045.

To actually reach 100 percent clean energy, first we need to find common ground. We need to bridge California’s rural-urban differences and address the often-wide divide between business interests and the concerns of social justice activists. Together, we’re proof that’s not as hard as it sounds.

One of us represents rural businesses at the Sierra Business Council, and the other is based in the LA-Bakersfield area and speaks up for environmental justice on the state’s Air Resources Board.

And from Fresno to Tahoe, no corner of this state is untouched by air pollution and climate change. Fossil fuels represent the economy of yesterday, and with SB 100 we have a golden opportunity to push forward, innovate, and leave them in the dust.

No state is better equipped to take on this audacious challenge of a 100 percent clean energy economy. California’s clean energy juggernaut rivals that of entire countries, with half a million jobs statewide. One of every six advanced energy workers nationwide is based in California, in part because our state has dutifully created a cutting-edge suite of policies, cultivating a climate that attracted these innovators and the good jobs they bring.

The meteoric rise of clean energy jobs has wowed economists and politicians alike: clean economy jobs rose by 18 percent in 2015, six times as fast as job growth overall in California. Forecasts predict another eight percent increase this year.

Behind these statistics are actual Californians whose lives are measurably improving. Visionaries in the Central Valley are trying to generate clean fuels using everything from sugar beets to medical waste to vineyard trimmings. Workers are building zero-emission electric buses in the western Mojave Desert. In Richmond, job trainees are installing solar panels on rooftops in affordable apartment communities.

Yet for too long, we’ve accepted a reality where pockets of pollution trouble some of the state’s most marginalized neighborhoods. Entire communities grapple not just with deeply entrenched poverty but with elevated rates of asthma, cancer, and heart disease, and they fear California’s clean energy revolution could leave them behind.

With SB 100, they’ll know better days are ahead as zero-emission facilities replace dirty power plants. Fewer people will call in sick to work or school or rush to the ER with heart attacks or asthma attacks. Kids will start playing outside again because the air is safe for them to breathe.
If we do this right, the business and jobs landscape will evolve too. Our businesses will be able to compete and even nurture new industries in agriculture, forestry, and natural lands in places like Huron and Truckee. Linkages with workforce development programs will lift families out of poverty.

Climate change compels us to act. With SB 100, we can continue to transform California’s economy in a way that helps hard-to-reach urban and rural communities alike, and in places where job creation has typically lagged.

Business groups and equity advocates don’t always see eye-to-eye, but this is too important to stay silent. Because achieving ambitious goals is what makes California tick — yes on SB 100.

Ed’s Note: Dean Florez, representing environmental justice issues, is a member of the California Air Resources Board. He served 12 years in the Legislature and lives in the Los Angeles/Bakersfield area. Steve Frisch is president of the Sierra Business Council and lives in Truckee.
By Danny Kennedy and Tim McRae

This week, state legislators have the opportunity to make California the largest economy in the world that is committed to 100 percent clean energy. Senate Bill 100 would set a target of 100 percent renewable energy for California’s electric grid by 2045. Doing so would hang out a “we’re open for business” sign that would attract entrepreneurs and established companies alike, and create a clean energy business boom like nothing our state has seen before.

This prediction is based on experience. When California passed landmark climate and clean energy legislation in 2006, hundreds of clean-tech entrepreneurs flocked to the state to set up shop. Following tech-industry custom, some failed. But many succeeded. And they built a solar industry responsible for more than 1 million solar roofs across the country.

Now comes SB 100, making this potentially the biggest market moment in clean energy history. You have the world’s sixth-largest economy saying, “We’re all in on advanced energy.”
This clear strategic intent will be catnip to entrepreneurs. Clean tech companies big and small will find California an irresistible place to invest and innovate. Employees and the economy as a whole will benefit, too — and that’s before we even consider the environmental benefits.

The San Francisco/Oakland/Freemont metropolitan area hosts more than 72,000 clean energy jobs, while San Jose/Sunnyvale/Santa Clara home to 34,000 advanced energy jobs. If SB 100 becomes law, we can expect more. A lot of these jobs focus on innovation: the Bay Area has become the number one producer of green-tech patents in the state, just ahead of Silicon Valley, generating a combined 3,000 green technology patents last year. Passing a 100 percent clean energy law would boost that number, as well.

SB 100 would benefit not just our corner of California, but the entire state. We already have the largest advanced energy economy in the United States, with more than half a million Californians working in electric vehicles, renewable energy, and energy storage.

One-sixth of the nation’s advanced energy workforce works in California. Our state is home to America’s largest solar workforce. And we attract two-thirds of all of the nation’s clean tech investment, to the tune of almost $1.7 billion in 2016 alone.

All this economic activity didn’t happen by accident. California’s record of innovative energy and climate change policy has created fertile ground for our vibrant clean tech sector.

And whenever California has set clean energy goals, we have exceeded expectations. In fact, the current Renewables Portfolio Standard goal— which calls for 50 percent renewable energy by 2030 — is beginning to look a little too easy, since we already reached 29 percent renewable generation for electricity last year.

So we welcome SB 100 provisions that would accelerate existing goals, changing the 50 percent target date to 2026, and setting a goal of 60 percent renewable by 2030. That will encourage a steady flow of investment and innovation as our state pushes toward 100 percent clean power.

SB 100’s 100 percent target might look like a stretch now, but the wind is at our backs in terms of technological advances, cost curves, and trends in the worldwide energy market. By setting a stretch goal, we set ourselves up to crush it.

SB 100’s bold “open for business” market signal can’t help but drive an enormous amount of business development. And that will keep our region and our state out front, leading the nation and the world toward a clean energy future.

Danny Kennedy is a clean-tech entrepreneur and managing director of the nonprofit California Clean Energy Fund (CalCEF). Tim McRae is vice president for energy for the Silicon Valley Leadership Group, which represents more than 400 firms on issues, programs and campaigns that affect Silicon Valley’s economic health and quality of life.
SoCal economy will benefit from 100 percent renewable energy

By Mary Leslie

Tuesday, September 12, 2017

California’s fast-growing advanced energy economy is good for business and the economy. The industry is a source of more than 500,000 jobs across the state, and a bill now before the Legislature would make things even better.

The Legislature is considering Senate Bill 100, which would move our state’s electric grid to 100 percent renewable generation by 2045. And to help us make that goal, it would also accelerate California’s interim targets, calling for a 50 percent Renewables Portfolio Standard by 2026 and 60 percent by 2030.

Last year, renewables generated about 29 percent of our electricity, so those goals are ambitious, but importantly, are achievable. So far, each time California has set a clean energy goal, we have gotten there faster than planned. We can do it again — and we should, for the sake of our environment and our economy.
At the Los Angeles Business Council, we recently joined almost two dozen business groups in calling for SB100’s passage. The letter read, “While we support the climate and environmental goals of SB100, as business leaders and organizations we enthusiastically embrace the economic engine that this bill embodies for California …. We cannot afford to miss the opportunity to advance this important measure.”

The economic trends are clear, both in the United States and worldwide. Renewable costs keep falling, and in many places it’s cheaper to build wind and solar plants than new fossil-fired options. More renewable generation than fossil-fired generation was built last year, both in the U.S. and worldwide. In short, a massive move to advanced energy is under way and gaining speed. California is well positioned to lead the way, and SB100 will help keep us out front.

Our state boasts the largest advanced energy economy in the nation. More than 500,000 Californians work in fields like energy storage, clean energy generation, and advanced vehicles. One out of every six Americans working in advanced energy lives here. And we have the largest solar energy workforce in the United States; in fact, California’s solar sector employs nearly 10 times more people than all of the coal mining jobs in the entire nation put together.

California also leads the nation in terms of investment in clean technologies. We pulled in $9.8 billion in 2015, which is more than two-thirds of total U.S. clean-tech investment.

Taking a closer look at our own backyard: The Los Angeles-Long Beach-Santa Ana metropolitan area leads the state with 157,805 advanced energy jobs. That’s more than the motion picture, television and radio industries employ statewide. And energy innovation is alive and well in our region: we filed almost 1,130 green technology patents last year.

But it’s not just urban centers like Los Angeles that will benefit from cementing California’s commitment to advanced energy. Most renewable energy projects built in California in the last decade are in rural counties, including places that have struggled with higher unemployment levels. For example, in the San Joaquin Valley, the Renewables Portfolio Standard has created 88,000 jobs and injected $11.6 billion into the economy. In the Inland Empire, the construction of new renewable power plants generated 29,000 high-skilled and high-quality direct jobs from 2010 to 2016.

One final argument for expanding our commitment to renewable energy is experience. The last time California expanded our Renewables Portfolio Standard, we saw at least 354,000 additional direct job-years created statewide, along with at least 879,000 job-years in construction. Who would say no to an economic boost like that?

Businesses up and down the state and across the country have made commitments to purchasing clean power, with companies from Google to General Motors setting target dates to go 100 percent renewable. Dozens of American cities from coast to coast are setting all-clean-energy goals, too. If SB100 goes through, California will become the world’s first top-10 economy to commit to 100 percent renewable energy.
That will be a powerful market signal. And it will secure California’s clean energy leadership for years to come. California’s businesses will benefit — and our entire economy and environment will win, as well.

Mary Leslie is president of the Los Angeles Business Council.
Clean Energy Leads to Clean Air for California

By Michael Ong, MD, PhD

An Associate Professor in residence at UCLA’s David Geffen School of Medicine and a volunteer physician for the American Lung Association in California.

Wednesday, September 13th, 2017

The Los Angeles region is home to some of the worst air quality in the country. During the long, hot days of summer, Angelenos face continued unhealthy air days. It’s not just a problem for our region. Ninety percent of Californians live in areas that experience poor air quality at some point during the year. That cannot continue.

The American Lung Association’s State of the Air Report 2017 showed that California cities are among the most polluted in the country. Nearly every Californian is affected by poor air quality. Millions of individuals, especially in the Los Angeles region, face even worse conditions because they live near aging power plants, diesel engines, ports and freeways that spew dangerous emissions. Increasing clean, renewable energy and increasing the transition to zero emission vehicles would help reduce those emissions.

As a physician in the Los Angeles region, I see the toll that our dirty air has taken on residents, especially children and communities of color. In Los Angeles County alone, there are more than 750,000 children and adults dealing with asthma, with greater burdens felt in communities of color. This group is especially vulnerable to poor air quality caused by power plant emissions, freight traffic and more local sources which can increase the frequency and severity of asthma attacks. We can change that by changing the way we produce and use power.

We all use electricity every day, that’s a fact. But we don’t always think about its true costs. Fossil-fueled power generation contributes to ozone pollution and particle pollution, both of which have a significant impact on our air quality and public health. That pollution results in higher asthma rates, lung cancer, hospitalizations and even early death.

Beyond the air quality issues, these plants are considered the biggest driver of climate change. Power plants and energy production remain the largest stationary source of carbon pollution in the United States. Power production makes up about 20 percent of greenhouse gases generated in California and 30 percent nationally. As they spew out carbon and methane, they contribute to warmer temperatures that lead to increased wildfires, floods, extreme heat and more, all of which have a negative impact on our collective health.

These burdens to our air and our environment aren’t shared equally. Our most disadvantaged communities bear the brunt of fossil fuels. From extraction to transportation to burning of fossil
fuels, low income communities and communities of color are often impacted the most. As our climate and clean air policies move forward, we need to recognize that inequity and do more to shape our policies and our investments to make the most impact.

To get to clean air for everyone in California we have to step up our efforts to move away from fossil fuel based energy. California has already been a leader by adopting the first renewable fuel standards, and now we must double down. Senate Bill 100, the California Clean Energy Act of 2017, authored by Senator Kevin de Leon, would put us on the right track by establishing a new state goal to achieve 100 percent renewable energy by 2045.

This is an incredibly bold and ambitious strategy, but California is up for the challenge. Our state has already shown successes in clean renewable energy including wind, solar, and geothermal. As California pushes for more electric vehicles on the road, we should have the low-carbon energy infrastructure to ensure that we’re using clean renewable energy across all sectors. In fact, 2016 research by the Lung Association found health and climate benefits running into the billions of dollars by shifting to zero emission vehicles running on renewable power.

For the good of public health and our environment, I urge local leaders and residents to strongly support SB 100 to step up California’s drive to clean, renewable energy. Setting a path for 100 percent renewable energy means cleaner air, reduced cases of asthma and other lung diseases. It means a cleaner, brighter future for our children and generations to come.

*Michael Ong, MD, PhD, is an associate professor in residence at UCLA’s David Geffen School of Medicine and a volunteer physician for the American Lung Association in California.*
California should go all in on clean energy

By Kathryn Phillips
Special to the Bee
September 12, 2017

I remember when California set its first clean energy goal. In 2002, the Legislature set the nation’s highest goal for renewable energy: 20 percent of electricity generated by 2017.

It is now 2017, and our state is relying far more on clean energy than many could have imagined. We blew past the 20 percent goal, set a 33 percent milestone by 2020 and in 2015 established a goal of 50 percent clean energy by 2030.

Right now the need for fossil-fuel-free energy and climate leadership couldn’t be higher. Any day, the state Assembly will consider Senate Bill 100, which would commit us to 100 percent clean energy by 2045. We will be the largest economy in the world to set this goal.
For those who question whether or not this is achievable, I have to take us back to 2002 when Enron’s manipulation of natural gas prices led to an energy crisis that left thousands of people without power. Many people concluded that the best way to avoid another energy disaster was to diversify and stabilize the grid by adopting more renewable energy.

Making a commitment to more renewable energy has not only protected us from blackouts of massive proportions, but it has also created thousands of jobs, grown our economy and reduced air pollution.

Since 2002, Los Angeles has cut its ties with coal power and 11 California cities have committed to 100 percent clean energy. Thirteen companies headquartered in California, including Apple and Google, are cutting off fossil fuels completely.

Almost 500,000 Californians work in the clean energy industry, including 100,000 just in solar. And the Bureau of Labor Statistics recently declared that wind technician is the fastest growing job category in the nation.

But our clean energy progress isn’t enough. Nine out of every ten Californians breathe air considered unhealthy by the American Lung Association. Dirty power plants hold much of the blame, and they are overwhelmingly located in low-income and minority communities. No one should have to fight asthma or struggle to breathe because of their income level or how we power our state.

It’s time for us to go all in on clean energy for the sake of our health, economy and environment. By powering California with 100 percent clean energy, we can further bolster the world’s sixth biggest economy. There’s already a job-providing renewable energy site in all 58 counties and SB 100 promises many more.

Time after time, the Legislature has demonstrated that lawmakers can come together to advance renewable energy. California is already on track to surpass the existing goal of 50 percent renewable energy by 2030.

Our lawmakers can boldly declare that we are ready for 100 percent clean electricity in California by 2045.

*Kathryn Phillips is director of Sierra Club California. She can be contacted at kathryn.phillips@sierraclub.org.*

*Read more here: http://www.sacbee.com/opinion/op-ed/soapbox/article172858086.html#storylink=cpy*
Op-Ed: California is 100 percent ready for Clean Electricity

By: Bret Weinberger

September 12, 2017 11:10 pm

Take a moment to envision the year 2045, right here in California. Do you think we'll still power our society with coal and gas and accelerating global warming, or will we have a cleaner economy, running on renewable energy sources? Will large oil companies scramble to drill and frack everywhere they can, or will skilled technicians manage a vast infrastructure of solar, wind and geothermal energy?

According to a recent Public Policy Institute of California poll, 76 percent of Californians believe it is time to phase out fossil fuels and move toward a clean, renewable-energy society. Now, we have the opportunity to do just that.

I am writing in support of Senate Bill 100, sponsored by State Senate President Pro Tem Kevin De León. This bill sets the goal of generating 100 percent of our electricity here in California from carbon-free sources.

The time for clean energy is now, as too much of our energy comes from fossil fuels that wreak havoc on our environment.
We have to dig, frack or drill into our land and oceans to get these fossil fuels. We have to transport them hundreds of miles on truck, rail or ship, which additionally poses great risks of spills, fires and explosions all along the way. We then have to refine them, which puts the health and safety of local communities at risk.

Finally, when they are burned, they pollute our air and water and cause global warming. Sadly, we are seeing the effects of global warming in our daily lives, from the fires and record heat waves ravaging Los Angeles, to the tragic destruction caused by flooding from warming waters.

This is clearly an urgent call for action.

Luckily, we have all the technology we need to generate our electricity from clean energy sources like wind, solar and geothermal. We also have a workforce ready to build a modern infrastructure.

Over the past 15 years, California has passed clean energy standards that have increased the amount of electricity the state generates from clean sources. Current law requires that we generate 50 percent of our electricity from clean energy sources by 2030.

SB 100 would speed up that timeline, so that we generate 50 percent of our electricity from clean sources by 2026, and 60 percent by 2030. It would require state agencies to plan to generate the last 40 percent of our energy from clean and carbon-free sources by 2045.

This is a great step for California, the country and the world. In the face of rollbacks to our environmental protections at the federal level, California is taking charge and moving confidently to 100 percent clean energy.

All of these voices are speaking loud and clear: “We are 100 percent ready for 100 percent clean energy.” Clean energy is good for our planet, good for our health and good for our economy. We must take action now to ensure a 100 percent clean energy future for California.

The bill is set to be voted on the California State Assembly floor this week. Please let your local Assemblymember know that you want a “YES” vote for a clean-running California.

Disclaimer: Bret Weinberger is a member of Environment California, a statewide citizen-based environmental advocacy organization.
I live in a neighborhood known as Ghost Town in Wilmington, California. We are less than half a mile from the Tesoro oil refinery, and there are a total of five refineries in our community. Multiple freeways crisscross the area, and busy ports are nearby too. Almost all of my family lives on our same block, and most of us suffer from asthma. Under my roof, we could easily confuse our inhalers, but fortunately the one I tuck in my purse every morning is a different color than the one my mother carries and the one my 16-year-old daughter attaches to her backpack.

Our community is nearly 100 percent Latino with a sizable immigrant population. Earlier this year, the local air district approved Tesoro’s plan to merge with the neighboring BP refinery in Carson. When completed, the facility will be the West Coast’s largest oil refinery.

That’s why they call our neighborhood Ghost Town. When we ask for help—from the police, from local officials, from the air district—hardly anyone answers our call.
This week, we finally see signs of hope—a beacon that could even reach Ghost Town. **SB 100**, sponsored by Senate pro Tem Kevin de León, would set California on a path toward 100 percent clean energy. Friday is the deadline for the bill to either advance or fail.

SB 100 is the relief we desperately need. We need local Assemblymembers like Ian Calderon, Patrick O’Donnell, and our own Mike Gipson to be our voice in the legislature and say yes to clean air for not just Ghost Town but for the LA region and California as a whole. We need Ghost Town to get the same attention and respect as San Pedro and Rancho Palos Verdes.

Unless we steer California toward a future without fossil fuels, neighborhoods like mine will continue to bear the brunt. We already have filters in our bedrooms to clean the air we breathe when we sleep. With the refinery expansion, we know things will get worse.

Out of necessity, my neighbors have found creative ways to control their asthma. They’ve installed sensors inside their homes to track local air quality. They close windows and doors when pollution peaks—even when it’s so hot because they can’t afford air conditioning—knowing an asthma attack could send anyone to the ER.

But still, with harmful toxins in the air we breathe, there’s only so much we can do to safeguard our families from harm. In one house on our block, three generations were wiped out by cancer: the grandmother, the father, and then the son. In another home nearby, a mother died of cancer, leaving young kids behind, and they lost their home as a result. My aunt was also treated for cancer. She survived but eventually had to move out of California.

People in all California neighborhoods should be able to thrive and live their lives with dignity. What we want is simple: to be able to open the window on a nice day and to let our kids play outside without falling ill. Too many Californians, especially low-income families, breathe in unhealthy air that causes senseless suffering and robs us of long life.

With SB 100, California can begin to correct years of injustice. But first, we need our local Assemblymembers to have our back.

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*Magali Sanchez-Hall lives in Wilmington and is a member of Communities for a Better Environment.*
When you live in a state with 3,427 miles of shoreline, six of the top 10 U.S. metro areas with the worst year-round air pollution and refineries that process about 84 million gallons of petroleum every day, you don’t have the luxury of willful ignorance or cynicism about climate change and the devastation it can inflict.

As the Trump administration works to roll back decades of environmental progress at the federal level, it’s up to state and local governments—none with more clout than California, home to the world’s sixth-largest economy—to fill the leadership and policy gaps to create a safer and healthier future.
Senate Bill 100 would shift our state to 100 percent renewable and zero carbon electricity by 2045. The bill, authored by California Senate President Kevin de León, mandates that California get 50 percent of its electricity from renewable sources by 2026 (four years earlier than currently required) and 60 percent by 2030, leading up to the ultimate 2045 goal.

SB 100 is popular—76 percent of Californian adults support the bill and it has earned the endorsement not only of environmental groups, but leaders in the environmental justice, public health, labor, faith and business communities. If California’s Assembly does the right thing and passes the bill by September 15, the Golden State will take a giant step toward thwarting the public health crises and natural disasters that climate change portends.

Momentum is growing for renewable energy across California. Cities including Lancaster, Monterey, San Diego, Santa Barbara and Solana Beach have publicly committed to 100 percent clean energy. And dozens of cities across the state have either pledged to uphold the Paris Accord that President Trump abandoned or agreed in their city plans to cut carbon emissions by 80 to 100 percent.

Of course, some utilities oppose it because they’re reluctant to change their own outdated business models. None of this will matter if we don’t do all we can to solve climate change.

Other state and local governments are already fighting for clean futures. In 2015, Hawaii became the first state to commit to achieving 100 percent renewable electricity by 2045. The Massachusetts state legislature is also considering a 100 percent renewables bill.

This state level activity is complemented by initiatives at a growing number of major businesses, institutions and cities across the country. Together, states, cities and private enterprise can overcome federal inertia. And by setting lofty, yet achievable, goals, our local governments are codifying that we have to make changes to combat global warming. We have the will as a people to work together and make this happen.

Our transition to a clean energy system has already begun. But the need to reduce the pollution that causes global warming grows more urgent every day, so we need to step up the pace. To maximize the benefits of moving to 100 percent renewable energy, leaders at all levels must act to accelerate our progress. America’s energy policy should facilitate mass deployment of clean energy solutions, support research and development of new clean energy technologies, and keep coal, oil and gas reserves in the ground.
So regardless of the Trump administration’s actions, we as Californians can band together to keep our environment clean, healthy and safe. It’s up to our legislators to fulfill the will of the people.

*Michelle Kinman isn’t just the Clean Energy Advocate for Environment California. She’s a mom who sees the Torrance refinery out of her home windows, providing a daily reminder of the dangers of our reliance on fossil fuels.*
Having proven that clean energy can be a strong economic driver, San Diego has committed to achieving 100 percent renewable and zero carbon emission energy sources. The bill would move up the deadline to achieve 50 percent of power generation from such sources to 2026, raise the 2030 mandate to 60 percent, and calls for 100 percent of power generated by renewable and zero carbon emission sources by 2045.

California’s climate and clean energy policies, many of which have been pioneered in San Diego, have been a boon for driving the state’s economy and positioning the Golden State as a national and global clean energy leader. California has the largest advanced energy industry in the United States, employing one in every six advanced energy workers nationwide. Employment in that sector grew at 18 percent in 2015, six times the rate of overall employment growth. In 2017, California employers project that advanced energy employment will increase by another 8 percent. Additionally, California continues to lead the country in attracting cleantech investment—reaching $9.8 billion in 2015—in part because our policies drive demand for things like renewable energy, shifting the emphasis of corporate investors.

Policy Drives Growth

California is the top state for solar jobs, employing 152,947 workers. In California, more than 500,000 employers spend some or all of their time engaged in advanced energy work, such as advanced electricity generation, energy efficiency, advanced grid technology, energy storage, and advanced vehicles. The clean energy workforce is 40 percent of the high-quality new jobs that train and support skilled workers with family-sustaining compensation and benefits. SB 100 will ensure that California keeps driving these remarkable jobs and economic activity gains further and faster. We’ve seen similar renewable energy policies create positive change here.

Many of the people who visit the Port of San Diego each day are likely unaware that solar electricity is increasingly powering operations. Since 2009, the Port has been investing in photovoltaic systems to offset its own energy use. The four solar power systems on site generate $20,000 kilowatt hours of electricity annually, which offsets its costs by roughly $125,000 per year. The Port is also tied into the San Diego region’s electricity grid, which currently has a renewable portfolio of approximately 43 percent. The Port is one of the first ports in the nation to adopt a Climate Action Plan.

San Diego Leads in Installations

There are thousands of clean electricity projects powering businesses, homes, schools of worship, and government facilities all across San Diego County. In fact, San Diego has more installed solar projects than any other major metropolitan area in the entire country. Additionally, more than 36,000 San Diegans are employed in the cleantech industry, which had an economic output of over $6.8 billion in our region in 2016.

Those activities, spurred by private and public partners, resulted in a leading cleantech research firm — Clean Edge — ranking San Diego fourth in the nation for cleantech leadership in 2017. More specifically, the San Diego region ranks first in the nation in climate and carbon management; fourth in advanced transportation; sixth in cleantech innovation, invention, and workforce; and twenty-second in green buildings.

Given the successes we’ve seen in San Diego, we support the climate and environmental goals of SB 100, and we enthusiastically embrace the economic engine that this bill will drive for California. We cannot afford to miss the opportunity to advance this important measure.

Setting California on a path to 100 percent renewable and zero carbon electricity generation will generate good local jobs, ensure clean energy, and promote a healthier environment for communities here in San Diego and across the state. Anchors aweigh on SB100! Jason Anderson is CEO of Cleantech San Diego. Robert Valderrama is Chairman of the Board of Port Commissioners of the Port of San Diego.
If we want a healthy California, it’s time to embrace a 100 percent renewable energy future. Senate Bill 100 — which will be up for a vote in the state legislature shortly after the summer recess — would do just that.

Climate change is the greatest health challenge of this century, according to the Lancet Commission it is a medical emergency. While the health impacts of climate change affect us all, they disproportionately affect the vulnerable and disadvantaged. Climate change threatens the systems on which human life depends — our air, water, food, shelter, and security.

Our energy system is one of the biggest sources of climate pollution. So, the faster we transition from the dirty energy sources of the past to clean, renewable energy, the better able we will be to protect our communities from large-scale climate catastrophe (think coastal flooding, extreme heat, wildfires and storms, and widespread food and water shortages).

As health professionals, we see the impacts of fossil fuel dependence every day — whether it is asthma attacks exacerbated by air pollution or heat-related illnesses due to a warming climate. These health impacts are expected to only worsen with rising temperatures.

Low-income communities and communities of color are disproportionately burdened by air pollution generated by fossil fuel use. In California, for example, asthma is about 30 percent more prevalent among African-Americans than among Caucasians; rates among American Indians and Alaska Natives are more than 40 percent higher than among whites.

Switching to cleaner energy sources and renewable electricity can address these health inequities while alleviating much suffering and saving lives.

Even “cleaner” natural gas takes a toll on public health. Extraction, storage, and transport of natural gas results in emissions of particulate matter, methane, and volatile organic compounds — including the carcinogen benzene. Methane and volatile organic compounds also contribute to ground-level ozone (smog). California residents are no strangers to the health and safety risks of natural gas, as witnessed by the illness and forced evacuations resulting from the massive methane leak at Aliso Canyon and the tragic loss of life and homes in San Bruno. Reducing our reliance on natural gas and other fossil fuels by switching to renewable energy will reduce these risks.
With the recent withdrawal of the U.S. from the Paris climate agreement, California’s national and global leadership in reducing climate pollution becomes even more important. SB 100, introduced by Senate Leader Kevin de León, would make California the second state, after Hawaii, to commit to transition to 100 percent renewable energy and zero-carbon sources for electricity by midcentury.

Switching from fossil fuels to 100 percent clean, safe, renewable energy — like wind, solar and hydroelectric — is one of the most important things we can do for the climate, for the health of our communities now, and for the health of future generations. We must contact our legislators and demand no less.

*Richard Allen Williams, M.D. is president of the National Medical Association and Founder, Association of Black Cardiologists. Mary Pittman, Dr.P.H. is president of the Public Health Association. They wrote this for the Urban Resilience Project.*
It’s time for 100 percent clean energy for all

By Billy Parish on June 8, 2017

Amidst all of the news about climate change, it’s easy to overlook one major cause for optimism: Clean energy is winning. Here in California, renewables have come so far, so fast that we’re breaking our records almost as quickly as we set them. For a few hours in March, we got 50 percent of our state’s electricity from clean energy for the first time. Less than two months later, on May 13, we blew past that milestone, briefly achieving an 80 percent renewable electric grid.

Now, our legislators are preparing to consider whether it’s time for the world’s sixth largest economy to go all the way and set its sights on the clean energy holy grail: a grid powered by nothing but wind, water and sunlight.

On May 1, California Senate leader Kevin de Leon announced Senate Bill 100, which would mandate that California hit its current goal of 50 percent renewable electricity four years early (by 2026 instead of 2030), while also aiming for a new, 100 percent renewable electricity goal in 2045. Initially introduced on the same day that Congress voted in Scott Pruitt as head of the Environmental Protection Agency, the bill is a symbol of California’s resistance to backwards federal energy policy. More than that, SB 100 is a milestone in a global effort to reinvent our energy system — and an incredible opportunity for California to lead the way in finishing the job.

Not long ago, SB 100 wouldn’t have even been imaginable. But for years now, state policy makers, urged on by Californians, have done everything they can to make clean energy a Golden State brand. California today has six times more solar power, 10 times more electric vehicles and four times more clean tech patents than any other state.

California’s leadership in clean energy has also translated into growth in clean energy jobs. A national census conducted last year found that California had more solar workers than the next 15 states combined. To put the numbers another way: We currently have more people employed in solar in California than the whole country does in coal. Thanks to these successes and forward-looking research out of California universities, we can now see the path to building a completely clean electric grid. We know the goal is achievable. The question is whether we have the political willpower. So why should California aim for 100 percent?

In economic terms, a transition to 100 percent would create not just a new batch of companies but whole new industries. California would not only have to accelerate the deployment of wind and solar, but also craft the policy and make the investments to integrate and scale technologies, such as batteries and advanced smart grid and efficiency applications, necessary to create a fully renewable grid. These technologies exist and they will grow into huge global businesses as the next era of clean energy unfolds. The question is whether it will be California, China or another state or country that will lead that new era.
Aiming for 100 percent would also have a profound impact in determining who benefits from clean energy. Clean energy brings economic benefits, but it’s currently easier for wealthier people (think: those who own homes and have good credit) to access those benefits. A lot of good work is being done to expand access clean energy, but we need to set a bigger, north star goal. Everyone should have access to the economic benefits of clean energy. No one should have to raise their kids in sight of a power plant or a polluted river. It’s time we aimed at 100 percent clean energy for all, as fast as possible.

Above all, it’s time for California to aim for 100 percent because it would show, once and for all, that a strong, equitable economy can go hand in hand with powerful climate action. The fossil fuel industry’s strongest tactic has long been to argue that the modern economy can’t go on without it. That argument has already begun to look worn, as nearly a hundred major corporations, cities from San Francisco to Atlanta, states like Hawaii and Massachusetts and even countries like Denmark, have begun to set 100 percent renewable energy targets. California, though, operates on a whole different scale. SB 100 would stand as one of the most ambitious renewable energy goals every adopted anywhere in the world. If we can do it here, it can be done anywhere.

Like most concerned about the future of our planet, de Leon understands that 2017 is a special year. It’s a year of peril for the environment, but also a year in which California has a unique opportunity to aim high. At this point in history, it’s clear that clean energy will inevitably replace fossil fuels. The question is how long it will take, and the answer to that question matters.

I, for one, don’t want to pass up an opportunity to leave my grandkids a fossil fuel-free state. It’s time for California to do once again what it has done so many times before on clean energy: lead.

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