



COLAB SAN LUIS OBISPO WEEK OF MAY 20 - 26, 2018

ALERT

PROPOSED SLO OIL WELL BAN IS ILLEGAL MONTEREY COUNTY WILL NOT APPEAL COURT DECISION VOIDING ITS VOTER APPROVED OIL AND GAS WELL BAN

In December 2017 Monterey County Superior Court Judge Thomas Wills ruled that its voter approved Measure Z, which banned all new oil and gas wells, banned water injection wells, and restricted maintenance activities was illegal. He did decide, with ironic logic, that provisions of the ordinance banning fracking were legal because there is no fracking in Monterey County. There would be no way 1 for an appellant oil producer to appeal an anti-fracking provision because they had not yet been harmed. Industry witnesses in the trial testified that they did not intend to undertake fracking.

Significantly, last week the Monterey County Board of Supervisors determined not to appeal the case, citing the probability that the appeal process would cost millions of dollars of taxpayer money and had no guaranteed results. We, of course cannot know what the Monterey County Counsel and their outside expert consulting attorneys said in closed session, but it apparently it wasn't good. The oil companies, for their part, agreed to no fracking, pointing out that the oilbearing strata in Monterey County consist of alluvial sands and do not lend themselves to fracking.

The Court held in part:

...that California's state oil and gas legal and regulatory scheme "fully occupies the area of the manner of oil and gas production" and therefore preempts the Monterey County policy banning underground wastewater injection and prohibiting the drilling of any new wells. Because Measure Z sought to regulate the manner of oil and gas production by restricting particular production techniques it "is in conflict with general law and is therefore preempted." The Court also held that Measure Z conflicted with both state and federal law governing underground injection. The Safe Water Drinking Act directed the Environmental Protection Agency "to oversee underground injection throughout the United States" and granted the State of California the primary enforcement responsibility. The county measure "directly conflicts" with the state's mandate.

Monterey County's oldest continuously producing oil field at San Ardo has been in operation for over 70 years.

The proponents of the oil and gas well ban, led by the Center for Biological Diversity, have filed an appeal. They will be able to spend millions on that appeal as they are ultimately funded by the usual coterie of Hungarian billionaires, Russian cronies of Vladimir Putin, Iranian Ayatollahs, and Middle Eastern oil sheiks who operate through a network of US foundations. They could care less about climate change, CO₂, and water quality. They want to destroy the United States and Israel.

It is likely that the proposed measure pending in SLO County will qualify for the ballot on the basis of 20,000 signatures that its proponents have collected. However if it is illegal on its face, will the SLO County Counsel and the Board of Supervisors challenge it and resist having to spend money processing it and placing it on the ballot? Ultimately and if the voters approve it, the County will have to spend millions defending it or else incur the wrath of the SLO county progressive left machine.

At least they know now that if it passes, the County will be in Court spending a lot of money to defend it. Reportedly, Monterey County has already spent in excess of \$1million defending their version up to this point and prior to the settlement.



Vladimir Putin, President of Russia and Ali Khamenei, Supreme Ruler of Iran.

THIS WEEK

NO BOARD OF SUPERVISORS MEETING

APCD MEETING – LIGHT AGENDA INCREMENTAL REGULATORY CREEP PROPOSED BUDGET DOES NOT SEEM TO CALL FOR FEE HIKES

LAST WEEK

3RD QUARTER FINANCIAL REPORT – RECEIVED WITH PRAISE BY BOARD

(GIBSON, HILL & PAULDING EARLIER CLAIMS OF FINANCIAL DISASTER EVAPORATED)

FY 2018-19 BALANCED BUDGET SUBMITTED PRETTY MUCH STATUS QUO – REVIEW WILL BE JUNE 11-13, 2018

HOUSING PERMITS REQUESTED IN UNINCORPORATED COUNTY DROP TO RECESSION LOWS

SLO COLAB IN DEPTH

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Taxpayers lose again with new solar panel mandate
By Jon Coupal

Alexander Hamilton's solar panels
By John Cochrane

Let's Talk About Net Present Value and Solar Panels

Without understanding it, you'll never know if putting solar panels on your roof (or buying a share of stock) is a good deal or not.

By Justin Fox

THIS WEEK'S HIGHLIGHTS

No Board of Supervisors meeting on Tuesday, May 22, 2018 (Not Scheduled)

The two meetings per month schedule seems to be working well. There is no backup, and the meetings end by 5:00 PM. The Board could use the extra time to schedule some workshops on alternate Tuesdays to go over the proposed FY 2018-19 budget and related performance measures in more detail before budget week in June.

The staff has more time to do real work and not simply be on a treadmill preparing for meetings.

San Luis Obispo County Air Pollution Control District (APCD) meeting of Wednesday, May 23, 2018 (Scheduled)

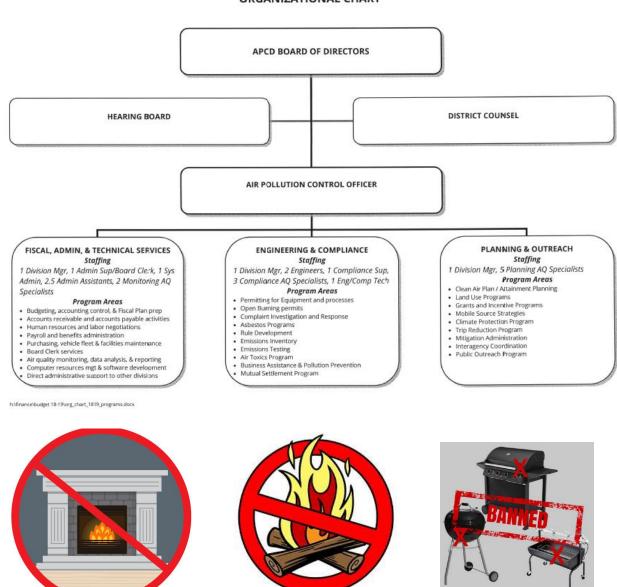
In General: There are no large policy matters on this agenda. However, after reading various agenda items including the APCD's Proposed FY 2018-19 Budget, one comes away with a depressing realization that the APCD and the State for which it fronts have penetrated many aspects of life in the name of "Clean Air," "Climate Change," and Greenhouse Gas Reduction."

For example:

- Work with State Parks to implement Hearing Board Stipulated Order of Abatement 17-01 (SOA 17-01), including Year 1 mitigation and the development of the 4-year Particulate Matter Plan.
- Conduct community workshops according to SOA 17-01.
- Report on crystalline silica findings on the Nipomo Mesa.
- Review Nipomo Mesa monitoring sites and continue assisting State Parks with air monitoring operations and data handling.
- Implement extensive new local grant programs for farm equipment and economically disadvantaged communities.
- Work to establish an automobile hydrogen fuel facility within the county.
- Manage expected staff retirements and reduce costs by increasing the use of college student interns and staff cross-training.
- Enhance voluntary "Don't Light Tonight" education and outreach for fall and winter adverse smoke dispersion days.

- Assist CAL FIRE and land managers to facilitate effective implementation of prescribed burns to manage air quality impacts, fire danger, and public health.
- Continue assisting cities with implementation of locally adopted Climate Action Plans to comply with state GHG reduction requirements for local governments.
- Continue working closely with CARB and USEPA to track the impacts of pollution transport to SLO County's nonattainment region and track upwind air district rules and attainment strategies to ensure expected emission reductions appropriately benefit our county.
- Work with Santa Barbara and Ventura county APCDs to develop and implement an electric vehicle (EV) Readiness Plan to expand infrastructure throughout the region, including increased availability of EV Level 2 and fast-chargers.

AIR POLLUTION CONTROL DISTRICT ORGANIZATIONAL CHART



The APCD has a State-funded grant program to switch out your wood-burning fireplace for some sort of low emission or synthetic replacement. It is only a matter of time before the State bans fireplaces, campfires, and barbeques.

Woodsmoke Reduction Program Funding: The Woodsmoke Reduction Program is providing \$5,000,000 in California project funding from fiscal year 16/17 Cap-and-Trade proceeds. The program is being administered by the California Air Pollution Control Officers Association (CAPCOA) in coordination with local air districts. APCD submitted our program plan to CAPCOA and CAPCOA approved our plan on May 7, 2018. On May 8, 2018, staff provided dealer training and participating dealers will sign the master agreement for the program. The program offers financial incentives for homeowners to replace old, inefficient, and highly polluting wood stoves, wood inserts, or fireplaces with cleaner burning and more efficient home heating devices. The program will reduce greenhouse gas emissions, criteria pollutants, and air toxics from the increased efficiency and reduced emissions of the newly installed home heating devices. Starting July 1, 2018, San Luis Obispo County residents using uncertified wood stoves/inserts or fireplaces as a primary heat source will be eligible for incentives towards the purchase and installation of qualifying devices. Qualifying low-income applicants will receive enhanced funding for their projects. The Woodsmoke Reduction Program provides 10% of the award to CAPCOA and APCD for administration. Your Board action today will approve the APCD Woodsmoke Reduction Program Guidelines (Attachment # 1) and authorize acceptance from CAPCOA of \$135,000 to fund local projects and \$14,250 for APCD administration for a total of \$149,250.

An Expensive Regulated Future: In a few years it will be determined that not enough homeowners took advantage of the current volutary program. Next the requirement likely to be imposed may be that the conversion must be made upon the sale of a home in order for it to clear escrow.

Again and not too far into the future, it will be determined that the mandatory inclusion of solar panels on all new homes did not have a sufficient impact. At that point the Legislature will determine that they must be installed on all existing homes at the point of sale in order to clear escrow. As the song says:

I don't need no arms around me
And I don't need no drugs to calm me.
I have seen the writing on the wall.
Don't think I need anything at all.
No! Don't think I'll need anything at all.
All in all it was all just bricks in the wall.
All in all you were all just bricks in the wall.

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¹ From The Wall by Pink Floyd, 1979

LAST WEEK'S HIGHLIGHTS

Board of Supervisors Meeting of Tuesday, May 15, 2018 (Completed)

Item 19 - Third Quarter FY 2017-18 Financial Report. The Board received the report, approved some large financial transfers, and expressed great confidence in the County's budget and financial management.

In addition to the 3rd Quarter Financial update on the current fiscal year, the report contained much important information on the status of important financial and management matters. These included:

The added cost of salary and benefit increases and their financing

The current status of various types of County debt and credit ratings

Staffing additions

Progress on capital projects

Staffing vacancy rates

Other interesting facts, including

County 2017-18 Budget Status as of the End of the 3rd Quarter:

Revenues: Key recurring operating revenues including property taxes, general sales taxes, and intergovernmental revenue from the Federal Government appear to be on schedule for this time in the fiscal year.

Expenditures: Expenditures in some departments will exceed budget while others will under run their budgets, thus helping to bail out the ones that are going over.

After all the puts and takes as well as internal transfers, the County should end the year in the black. There is nothing remarkable about this because State law requires that counties end in balance and imposes penalties on the officials of counties that end the fiscal year with a deficit.

Section 29121 of the Government Code states: Except as otherwise provided by law, the obligations incurred or paid in excess of the amounts authorized in the budge unit appropriations are not a liability of the county or dependent special district, but a personal liability of the official authorizing the obligation.

The full report can be seen at the link:

 $\frac{http://agenda.slocounty.ca.gov/agenda/sanluisobispo/8700/QXR0YWNobWVudCAxIC0gRlkg}{MjAxNy0xOCBUaGlyZCBRdWFydGVyIEZpbmFuY2lhbCBSZXBvcnQucGRm/12/n/93827.doc}$

Item 20 - Submittal of the FY 2018-19 County Budget. The Hearings will begin on June 11, 2018, and could carry over onto the 12th. June 13th is generally reserved for consideration of requests for funding from not-for-profit community service agencies.

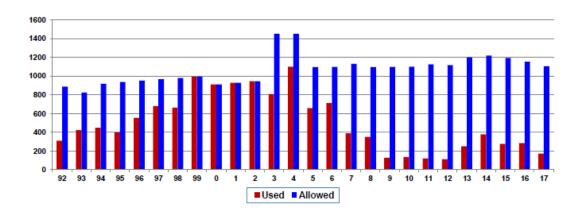
COLAB will review and comment. A quick glance suggests business as usual.

The full Budget can be read at the link:

http://www.slocounty.ca.gov/Departments/Administrative-Office/Forms-Documents/Budget/Current-Year-County-Special-District-Budgets/FY-2018-19-Recommended-Budget.aspx

Growth Management Ordinance Renewal: The Board renewed the growth management ordinance that limits the number of housing permits issued each year to a maximum of 2.3% for most of the County, 1.8% for Nipomo Mesa, and 0% for Cambria. Per the chart below, it appears that too much housing growth is not a problem. In fact just the opposite is true. The County's growth management and strategic plan has worked too well.

Allocation Use 1991 to 2017



<u>Table 1</u>

Residential Activity - Fiscal Year 17-18 as of March 30, 2018

	Dwelling Units		
	Allowed	Used	Percentage
County Wide - Residential Single Family	639	78	12 %
County Wide - Residential Multi Family *	339	71	21 %
Nipomo Mesa Area - Residential Single Family	84	24	29 %
Nipomo Mesa Area – Residential Multi Family *	45	0	0 %
Total	1107	173	16 %

^{*} includes residential unit ownership projects and cluster subdivisions within urban reserve and village reserve lines.

Amazingly and tragically, only 173 dwelling unit permits were used in the entire unincorporated County in FY 17-18.

Local Agency Formation Commission Meeting of Thursday, May 17, 2018 (Completed)

In General: The meeting was very short. The Board received several brief reports and took no major actions.

Item C-1: Legislative Update On Water Bills – The Safe and Affordable Drinking Water Fund (A New Tax). The report included a review of SB 623, which if ultimately adopted, which is likely, would impose a new tax (called a fee) on every home, business, and anyone else on water utility systems in California. The LAFCO Executive Director noted that many utilities, water districts, and community water systems around the State were in opposition.

Hopefully the LAFCO Board members will alert their respective jurisdictions.

This bill would impose, until July 1, 2020, a safe and affordable drinking water fee in specified amounts on each customer of a public water system, to be administered by the state board, in consultation with the California Department of Tax and Fee Administration, in accordance with the Fee Collection Procedures Law.

The fee imposed by the bill is essentially open-ended, as it leaves it to the State Water Quality Control Board to set the rates.

Thanks to LAFCO for spotting this one.

Item C-2: Status Report - Annexation #80 to the City of San Luis Obispo - San Luis Ranch. The report was received without comment except for Councilwoman Fonzi who asked that, once the City and the developer finish the development agreement, it be brought back to LAFCO. Mrs. Fonzi wants to review the affordable housing components

Background: The report indicated the tax split as follows:

The standard agreement was approved along with the County providing additional funding (\$1.4 million) to assist in the future development of regional roadway improvements at Prado and US 101. The County will retain the base property tax and 2/3's of the future growth increment. The City will get 1/3 of the future growth increment. The increment is based on the annual increase in the value of the properties as the development builds out.

When the tax agreement was on the County Supervisors agenda, no accompanying analysis was presented as to what the numbers are likely to be as the large project builds out. It is hard for the public and perhaps the Board if they did not receive the information in closed session, to actually gauge the impact of the agreement.

Ominously, we heard that the County and City didn't want anyone to know and just wanted to sweep it through on the consent calendar.

COLAB IN DEPTH

IN FIGHTING THE TROUBLESOME, LOCAL DAY-TO-DAY ASSAULTS ON OUR FREEDOM AND PROPERTY, IT IS ALSO IMPORTANT TO KEEP IN MIND THE LARGER UNDERLYING IDEOLOGICAL, POLITICAL, AND ECONOMIC CAUSES AND FORCES

VDH TELLS FOX NEWS: CALIFORNIA IS A MEDIEVAL SOCIETY Control Click on the link below the picture.

SEE A GREAT SYNTHESIS ON FAILURE OF PROGRESSIVE LEFT POLICY



CONTROL CLICK ON THE LINK BELOW TO SEE VDH EDUCATE TUCKER CARLSON

http://media2.foxnews.com/BrightCove/694940094001/ 2018/05/12/694940094001 5783914132001 5783908575 001.mp4

THREE GREAT ARTICLES EXPOSING THE STATE'S MANDATORY SOLAR PANEL SCAM

Taxpayers lose again with new solar panel mandate By Jon Coupal

The California Energy Commission has announced new regulations to require rooftop solar panels on all new homes constructed in California beginning in 2020. This forced mandate represents an extraordinary regulatory overreach.

However, don't expect too much political push-back against these new rules. Why? Because the "winners" who support the regulations have a lot more political juice than the "losers."

Tops on the list of winners is, of course, the solar industry. When your business is the manufacturing and installation of solar panels and you can get government to mandate the purchase of your product, you have a guaranteed customer base as well as a guaranteed revenue stream. For solar companies, spending a few million dollars on political influence results in a great (return on investment).

A less direct benefit behind the solar mandate is conferred on the building industry generally. Although the mandatory inclusion of solar panels will increase the cost of their "product," i.e. homes, this is a cost developers will just pass along to consumers. Because it's a government mandate, no developer will be put at a competitive disadvantage.

Add local government to the list of winners. The added cost for solar installations means the purchase price of the homes — upon which the Proposition 13 base-year value is established — will be higher. This translates into a big boost in property tax revenues.

Also a winner is the environmental community, which believes that climate change is a problem that transcends all other human concerns. These are the same interests pushing the policy that internal combustion engines should be banned.

While environmental activists may be a winner with these regulations, it is far from certain that the environment itself will be. Policy leaders continue to disregard the damage to the environment by the mindless pursuit of policies thought to be enviro-friendly. For example, wind turbines provide renewable energy, but at the cost of significant harm to bird populations. Likewise, California's infamous high speed rail project was sold as part of the state's climate change response. But the construction of the project is inflicting serious environmental damage in the Central Valley, and even the state's Legislative Analyst acknowledges that the HSR project will be a net producer of greenhouse gas emissions for the foreseeable future.

Have the advocates of mandatory solar panels actually performed a credible environmental assessment of what the manufacturing process for those panels does to the environment? Most solar panels are built in China, a nation that continues to build coal-fired electricity plants to power its industrial base.

The winners listed above are powerful interest groups that are very well funded and adept at applying political pressure to the California Legislature as well as regulatory agencies.

But future homebuyers and taxpayers are not nearly so influential. That's why they are the real losers. Home prices in California are sky-high and our political leaders mouth platitudes about the "housing crisis." So what's their answer? Adding \$10,000 to \$30,000 to the cost of all new homes in California whether homebuyers want solar panels or not.

The other loser is the principle of free enterprise. If the majority of homeowners have not purchased solar panels, it is because they have judged that the currently available technology does not offer benefits equal to its cost. A government mandate is an attempt to override that basic reality, at the expense of Californians who are already struggling to afford a home.

These new mandatory regulations are not in the public interest and will only add to the crisis of housing affordability in California. Perhaps we should add a few more winners to the list: Texas, Arizona, Nevada, Florida and other states where California's best and brightest young people will be moving to buy their first home.

Jon Coupal is president of the Howard Jarvis Taxpayers Association. This article first appeared in the Orange County Register of May 13, 2018 and the HJTA website.

Alexander Hamilton's solar panels By John Cochrane

I think I finally have figured out why California is mandating solar panels on top of houses.

As energy, environmental, or housing policy, it borders on the absurd, as pretty much everyone quickly figured out.

Just to recap, remember that most rooftop solar does not power the house underneath it. The energy goes out to the grid. Why not, you ask? Well, the rooftop energy comes at the wrong time, and we don't yet have economical storage, so you have to be connected to the grid anyway. Given that, the costs of switches to let the roof partially power the house at sometimes, power the grid at other times, is not worth the zero benefit. After all, electricity is electricity and your light bulb does not care where it came from.

So rooftops are just a place to put the electric utility's solar panels. Now let's consider, where is the best place to put solar panels that feed the grid?

Option A:



(OK, in reality the Mojave Desert, or the vast stretches of wasteland along I-5 pockmarked with angry farmer billboards, but the camels are cute.)

Option B: The roof of roof of a typical northern California house:



(OK, I'm having fun with this one, but you get the point. Actually a house off the grid is one

place where rooftop solar does make a lot of sense, but you don't have to force people to buy them in that case.)

To belabor the point, people like to build houses near trees. Trees shading roofs are heavily protected in Palo Alto where I live, and you risk massive fines if you cut one down. House roofs don't always pitch to the southwest at the optimum angle.

A house is an expensive and flammable structure for a solar panel. You need to be a lot more careful putting it up there than out in the desert. In California especially, each installation needs a separate design, design review, permits, and so on. Code requirements are stringent. Each installation needs big switches, where the fire department can get at them (and a separate one for the battery). Each house needs a separate set of switches to connect to the grid. All of these fixed costs are spread way out on a commercial solar farm out in the desert.

And so on. We don't operate tiny coal burning generators in each house for the same good reasons.

So why is California doing it? Grumpy free marketers tend to bemoan nitwit liberalism, but economics teaches us to look for rational maximizing actors even in government.

So here is a suggestion. It's actually a brilliant move. Large-scale rooftop solar is only sustained by subsidies -- tax credits for installation and the requirement that homeowners can sell power to their fellow citizens (through the utility) at above-market rates. To put the matter mildly, not everybody thinks these subsidies are a good idea, and moreover you can't count on Washington to maintain subsidies for the 30 year lifespan of solar panels. You never know, someone like, say, Donald Trump might get elected president and start tearing apart energy subsidies.

So, once solar panels are on the rooftops of thousands of registered voters, you have a natural constituency that will vote and otherwise pressure the state, the administration, congress, and agencies to continue solar subsidies.

The Alexander Hamilton story is that he wanted the US federal government to take on the state debts from the revolutionary war, in part to create a class of bondholders who would support the federal government's ability to raise taxes, to pay off that debt. Putting solar panels on houses, though ridiculously inefficient from an energy or environment point of view, achieves the same thing, in a nefarious sort of way.

Too bad they can't just give each of us a solar panel out in the desert, the way some charities show you "your" child in some third-world country. Once a year, you get a card "Happy holidays! I'm your solar panel, number 3457 in the Mojave desert. I've had a great year pumping out electricity! Here is your check for \$357.52 in subsidies and power generation. Remember to vote on election day!"

John Cochrane is a Senior Fellow of the <u>Hoover Institution</u> at Stanford. He was formerly a professor at the University of Chicago <u>Booth School of Business</u>. He is also an adjunct scholar of the <u>Cato Institute</u>. This article first appeared as a blog on May 18, 2018 Hoover Daily Report.

Let's Talk About Net Present Value and Solar Panels

Without understanding it, you'll never know if putting solar panels on your roof (or buying a share of stock) is a good deal or not.

By Justin Fox



Drilling deeper into the numbers. Photographer: Justin Sullivan/Getty Images

In 1202, the Pisan customs official's son who has come to be known as Fibonacci gave the world the mathematical tools to calculate the present value of a future stream of money. Now, 816 years later, net present value remains such a foreign concept to most people that it's deemed too arcane to mention before the general public.

At least, that's the impression I got after reading through the news coverage of the California Energy Commission's decision last week to require solar panels on virtually all new houses and low-rise apartment and condominium buildings (those with roofs that are especially tiny or are in the shade most of the time are exempted). I'm not the hugest fan of the move, given that the state's need for more housing seems to be greater than its need for more solar panels. But that's an argument for another day. What I'm curious about is whether it's a good deal for prospective homebuyers in California or a bad one.

The basic numbers on this, provided by the California Energy Commission and cited in multiple news articles, are that the new standard "will increase the cost of constructing a new home by about \$9,500 but will save \$19,000 in energy and maintenance costs over 30 years."

OK, \$19,000 is twice as much as \$9,500. But you wouldn't be getting all those savings at once, would you? Divide that \$19,000 over 30 years, and plug the resulting \$633.33 annual savings into Fibonacci's formula, and it's worth nowhere near twice as much as \$9,500. A key element in the formula is the interest rate by which future values are discounted. Use 4.3 percent — the

lowest 30-year mortgage rate I could find online — and the net present value is \$10,563. That's not a big savings!

Except ... the next line of the energy commission's FAQ on the new standards says that, if one buys a new solar-equipped house with a 30-year mortgage, the added mortgage cost will be \$40 a month and the energy savings \$80 a month. If you divide \$19,000 by 360 months (30 years times 12 months), you only get \$53. So maybe that \$19,000 is the net present value of the estimated future savings. Sure enough, after some digging, I found the "PreRulemaking" document for the new solar rule, which indeed makes clear that what they're talking about are "present-value energy cost savings over the 30-year period of analysis."

Why didn't they say that in the documents intended for public and media consumption? I'm guessing it's because they figured the words "present value" would be off-putting. Or maybe it's that everybody already knows that solar cost savings estimates are expressed in present-value terms and I'm getting all worked up over nothing, but I don't think so. I did a search on the phrase "present value" on Google News and all I came up with was a bunch of exercises in corporate valuation from Simply Wall Street, a CFO Magazine article on "The Renewed Importance of Purchase Price Allocations" and a syndicated newspaper column by "The Mortgage Professor." That last one was the only one aimed at a general readership.

Present value is a concept essential to informed decision-making about the future — and thus to modern life — yet very few people outside the financial sector (and even there I have some doubts) seem to know what it entails. Certainly most journalists don't. (I didn't until I went and wrote a book about the history of academic financial theory.) But the calculation is really simple, and it makes intuitive sense.

First, the calculation: The present value of a sum of money to be received n years in the future is that sum of money divided by 1 plus the interest rate (which means 1.05 if the interest rate is 5 percent) to the power of n. So \$10 in two years at 5 percent interest is \$10 divided by 1.05 squared, which comes to \$9.07. If you're getting \$10 a year for a number of years, all you need to do is add up the values for all the years, which is easy enough to do in Excel, Google Sheets, Apple's Numbers or another spreadsheet of your choice, although you can also just use an online NPV calculator.

That \$10 a year from now is worth less than \$10 today just makes sense, right? You might die in the interim, or you might have some use you could put the money to over the next year (an investment, say). Plus, there's the threat of inflation: You might not be able to buy as much with \$10 years from now as you can now. 1 Figuring out exactly how much less that \$10 is worth is a bit less straightforward, of course. It's all about the choice of discount rate, and while sometimes that's obvious, in many real-world applications, it is not. "Discount-rate variation," John Cochrane said in his presidential address to the American Finance Association in 2011, "is the central organizing question of current asset-pricing research."

So present-value calculations don't always give the right answer, in asset valuation, solar power savings estimates or other endeavors. But they're often essential to framing the right questions. Such as: What discount rate does the California Energy Commission use in calculating the present value of future energy savings? According to the commission's latest "Time Dependent Valuation of Energy for Developing Building Efficiency Standards" report, it's 3 percent. That's less than the 30-year mortgage rate, but the lower rate makes sense given that they're estimating the future savings in current dollars, not in inflated future dollars, whereas mortgage rates factor in an estimate of future inflation.

The estimated average future savings add up to about \$30,000, the present value of that is \$19,000, and that's twice the present cost. This sounds pretty advantageous for California homebuyers. It's most advantageous if you're buying in sunny and often scorchingly hot Palm Springs or points south and east (aka California Climate Zone 15), where the average estimated electricity cost savings per new house is \$33,911, and least advantageous if you're buying just over the mountains in San Diego (Climate Zone 7), where the estimated cost savings is only \$15,900 because it gets foggy in the mornings and the mild climate keeps home energy use down. But it seems like a pretty good deal all around.

Another big variable in this particular present-value calculation, though, is the future path of electricity prices. The California Energy Commission makes periodic forecasts, and it seems pretty transparent about the assumptions involved. Energy economist Severin Borenstein of the University of California at Berkeley complained last week that "the savings calculated for the households are based on residential electricity rates that are far above the actual cost of providing incremental energy." But if electricity prices go down — and requiring solar panels on virtually every new house in California may push them even further in that direction — then, well, energy costs will be lower. As a matter of public policy, it may be better, as Borenstein urges, to focus resources on large-scale solar generation instead of rooftop installations. But for people buying new houses in California, it seems like they'll be paying a lot less for electricity in either case.

It is true that many, perhaps most of us, intuitively discount the future in ways that don't comport with standard present-value models. This has come to be known in the behavioral economics literature as "hyperbolic discounting," the idea being that the discount rate in your personal present-value calculation might start out low but rises sharply after a year or two before settling down again in the distant future. If your discount rate is 3 percent for the first two years and 15 percent after that, \$30,000 in energy savings evenly allotted over 30 years has a present value of just \$4,341. In that case, you would find the new California rule to be a travesty. You would also be how we shall put it, a little bonkers. Sometimes it makes sense for the government to step in and wrest such decisions from individuals' hands, as it does with Social Security. Sometimes it doesn't.

Which side of that line does the California Energy Commission's decision — which also involves considerations of air pollution, climate change and energy reliability — fall on? Really,

I don't know, and I could have arrived at that same unhelpful conclusion without a tutorial in present-value calculation. But wasn't it more fun this way?

This column does not necessarily reflect the opinion of the editorial board or Bloomberg LP and its owners.

Justin Fox is a Bloomberg Opinion columnist covering business. He was the editorial director of Harvard Business Review and wrote for Time, Fortune and American Banker. He is the author of "The Myth of the Rational Market." This article first appeared on the Hoover Institution of Stanford University Daily Report of May 13, 2018.

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ANNOUNCEMENTS

PLEASE SEE FOLLOWING PAGES

STOP The Oil & Gas SHUTDOWN In San Luis Obispo County

For Immediate Release: May 1, 2018 Contact: Aaron Hanke | 805.538.2133

The Committee to Stop the Oil and Gas Shutdown in San Luis Obispo County calls initiative deceptive and damaging.

San Luis Obispo, **CA**— The committee to Stop the Oil and Gas Shutdown in San Luis Obispo County responded to the submission of signatures for a ballot measure that would have a detrimental effect on our local community.

The statement below can be attributed to Aaron Hanke, spokesperson for the coalition:

"Proponents of the anti-oil and gas initiative seek to portray their measure as a ban on hydraulic fracturing. But what the initiative would actually do is shut down all oil and gas production in the county over the next several years.

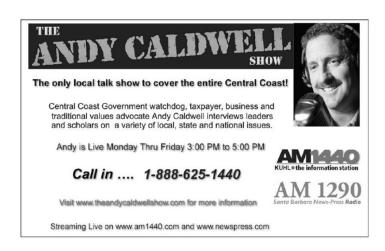
"Here in San Luis Obispo County, oil and gas production has been safely operating for decades and is highly regulated by at least 30 local, state and federal entities. In fact, only 5% of county lands are designated for oil and gas extraction and there is no hydraulic fracturing in San Luis Obispo County and no plans to do so. This initiative is unnecessary and goes too far.

"This overreach would hurt our community. Two hundred and sixty local and mainly blue-collar workers and families from diverse backgrounds who are reliant on the oil and gas industry would be threatened with losing their jobs, and millions in state and local taxes used to fund local schools as well as police and fire would also be lost. With the impending closure of Diablo Canyon, the last thing residents in San Luis Obispo County need is the loss of more middle-class job opportunities.

"In addition, every drop of oil that we do not produce locally would have to be imported from

somewhere else. As long as we need oil and gas to meet our energy needs, it's better for our state and for our community to continue to allow local producers to help meet our state's energy needs in the right, responsible way under the strictest global environmental regulations in the world. Rather than banning oil and gas production in the county, we should strive to be energy independent as we transition to a greater reliance on alternative energy sources.

"For over one hundred years, companies have responsibly produced oil and gas in San Luis Obispo County. If passed, the measure would have serious adverse economic impacts on our county."



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MIKE BROWN ADVOCATES BEFORE THE BOS



VICTOR DAVIS HANSON ADDRESSES A COLAB MIXER



DAN WALTERS EXPLAINS SACTO MACHINATIONS AT A COLAB FORUM

See the presentation at the link: https://youtu.be/eEdP4cvf-zA



AUTHOR & NATIONALLY SYNDICATED COMMENTATOR BEN SHAPIRO APPEARED AT A COLAB ANNUAL DINNER

Coalition of Labor, Agriculture and Business San Luis Obispo County "Your Property – Your Taxes – Our Future" PO Box 13601 – San Luis Obispo, CA 93406 / Phone: 805.548-0340

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(Ravised 2/2017)