

EJ Informational Packet

Addressing climate change and reducing greenhouse gas emissions is of critical importance to low-income communities and communities of color.

“Global warming will not affect everyone equally. As the Chair of the Intergovernmental Panel on Climate Change for the United Nations has stated, ‘[i]t is the poorest of the poor in the world, and this includes poor people even in prosperous societies, who are going to be the worst hit.’ The adverse impacts often will fall hardest on people of color and poor people because they are concentrated in areas that will bear the brunt of climate change, and because they are often the least able financially to deal with its impacts. They are also the ones who are least responsible for climate change. “

—California Attorney General's website

California Air Resources Board (CARB)'s Proposed Scoping Plan to implement AB32 "The Global Warming Solutions Act of 2006"

Background

- In September 2006, the legislature passed and Governor Schwarzenegger signed into law AB 32.
- This law established a cap on greenhouse gas (GHG) emissions at the level emitted in 1990. AB 32 required California to meet that cap by 2020.
- CARB calculated that meeting the cap would require reducing emissions about 15% from today's levels.
- The California Air Resources Board (CARB) was assigned the task of developing a "Scoping Plan" that sets the State's strategy to achieve the 2020 cap.
- The Proposed Scoping Plan must be adopted by CARB on or before January 1, 2009.
- The Plan is suppose to establish how California will achieve "the maximum technologically feasible and cost-effective reductions in greenhouse gas emissions from sources or categories of sources of greenhouse gases by 2020."
- CARB's **Proposed Scoping Plan (The Plan)**, released Oct. 15, 2008, is available at, <http://www.arb.ca.gov/cc/scopingplan/document/psp.pdf>

Key Elements of The Plan will not work

- The major focus of The Plan is to require the development of a **cap-and-trade program** that includes—at a minimum—6 other states, most of Canada, and northern Mexico.
- The Plan establishes a pollution trading program that allows most of the reductions to come from outside of California because of the use of a "cap-and-trade" scheme combined with "offsets" that can come from anywhere in the world.
- Nearly every other measure included in the plan has already been made part of California law or policy including the 33% renewable portfolio standard, California's clean car standards, several goods movement measures, and most of the energy efficiency goals.

There is a Better Way

- *The Environmental Justice community believes there is a better way to reduce greenhouse gas emissions.*
- Emissions reduction efforts should focus on changing how California makes and uses energy. Nearly all of the electricity, heating, and vehicle fuel used in California comes from burning fossil fuels—coal, petroleum, and natural gas.
- Fossil fuels also are the number one cause of greenhouse gas emissions and the pollution caused by extracting, using, and disposing of fossil fuels cause grave health problems in our communities.
- Environmental and Social Justice advocates have proposed that California adopt a three-pronged approach built upon:
 - Clear **regulations** and **standards**;
 - Aggressive monetary and non-monetary **incentives** to help business' achieve regulations such as the 33% RPS; and
 - A **carbon fee** to ensure the transition to California's clean energy future.

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13 Reasons to oppose carbon trading:

1. Time is of the essence
2. The European Union Emissions Trading Scheme (EU-ETS) has failed to deliver greenhouse gas emission reductions
3. Although the EU-ETS has not reduced greenhouse gas emissions it has awarded windfall profits to the largest polluters
4. Trading stifles technological innovation needed to achieve long-term goals for greenhouse gas reductions
5. Global Offsets are often unverifiable, lead to oppression, and do not benefit our communities
6. Trading is undemocratic, secretive, and excludes the public from decision-making about whether and how to address greenhouse gas emissions
7. Trading intensifies financial incentives for fraud
8. There is a broad-based rejection of trading
9. Climate change disproportionately affects communities of color fundamentally linking environmental justice to the need for real greenhouse gas emissions reductions
10. Failure to address the primary cause of greenhouse gas emissions will also fail to address the primary cause of negative health, safety, and quality of life impacts in communities of color
11. Pollution trading can create and exacerbate existing pollution “hot-spots”
12. Trading, investing, and profiting and gambling on public health is just wrong
13. There is a better way

See also, [“Reality versus Theory—Debunking the Myths of Cap-and-Trade”](#)

The Cap-and-Trade Charade for Climate Change

The Theory: Set a Cap on greenhouse gas emissions. Distribute permits (give away freely, auction, or both) to pollute equal to the cap. Polluting entities have to obtain enough permits to equal their emissions. They can choose to reduce their emissions or purchase (trade) permits to pollute.

The Reality: Pollution trading does not work. Some key reasons:

- [Price Volatility & Stifled technological innovation and deployment.](#) This free market scheme results in permit price volatility. So, companies have to speculate about the future cost of permits. This makes it very difficult for business’ to decide how much money to spend on new controls or to change processes. The uncertainty of prices makes it harder for inventors to know the price point for their innovation.
- [Too Much Pollution Is Allowed from the Start \(Over-Allocation\).](#) Because we have to guess about emissions levels (we just don’t know what facilities emitted in 1990), the process of setting the “cap” and the allocation becomes very political—with companies pushing to have the highest level possible. This has led to every pollution trading program being over-allocated. The result is over-supply of permits, low credit prices, and no reductions in the amount of pollution released.
- [Windfall Profits and Harm to Consumers.](#) Trading programs that give away pollution permits for free (ARB plans to give away approx. 90% of the permits) gives polluters free profits for their pollution. This is because polluters increase the cost of their products as if they paid for the permits anyway.

The “Fixes” don’t Fix it:

- [“Auctioning” does not fix pollution trading.](#) Auctions for permits may reduce the amount of windfall profits to the worst polluters, but it does nothing to address the long history of trading program failures—resulting in little to no emissions reductions or innovation.
- [Gaming.](#) As we see with the current worldwide financial meltdown and as we saw with the California blackouts in 2001, when the name of the game is making money, things can and do get out of control. The *Los Angeles Times* wrote that “some companies stand to make a great deal of money under a trading system... This presents opportunities for Enron-style market manipulation.” [1]

The Trail of Failures:

- [European Union Emissions Trading Scheme \(EU ETS\).](#) PHASE I (2005-2007): Under Phase I greenhouse gases actually increased in some cases, consumers paid higher energy costs, and some of EU’s worst polluters gained billions in free profits. PHASE II (2008-2012): The EU ETS “is set to hand hundreds of millions of pounds to some of Britain’s most polluting companies, with little or no benefit to the environment... which comes from the over-allocation of carbon permits under the [EU ETS Phase II]....” [2] Before the scheme was enacted no coal-fired power plants were proposed, however, “European countries are expected to put into operation about 50 coal-fired plants over the next five years... The [EU ETS], has tried to make power plants consider the costs of carbon... But with the price of oil so high, coal is far cheaper, even with the cost of permits to pollute factored in...” [3]
- [Northeastern States’ regional greenhouse gas Initiative \(RGGI\).](#) Although RGGI agreed to auction 100% of permits, they sold for only \$3.07 per ton at the first auction in Sept. 2008. That low price will not stimulate much, if any, investment in reductions. Observers do not expect the price to rise high enough to matter for quite some time. [4]
- [RECLAIM program in Los Angeles.](#) In 1994, regulators promised this plan would result in the Los Angeles Air Basin meeting federal health-protective smog levels by 2003, well in advance of the 2010 deadline under the Clean Air Act. This year the SCAQMD asked for another extension to the “deadline” for reaching the standards to 2024.

Acid Rain: The Non-Success Success Story

- The Acid Rain program (also called the SOx trading program) focused on reducing emissions from coal-fired power plants. This trading program is NOT comparable for several reasons, 1) No offsets were allowed. 2) The scale of a carbon trading program would be up to 100x larger than that for sulfur. 3) Unlike SO2, there are no readily-available “technical fixes” for CO2 (e.g. there is no low-sulfur coal or SO2-scrubber equivalent) and technological innovation was not needed for SO2 reductions unlike what is needed for carbon reductions. 4) SO2 reductions in the U.S. were modest compared to direct regulatory programs in the EU that achieved twice the reductions twice as fast.

Carbon “Offsets”

- The use of emissions “offsets” provides the means for entities emitting greenhouse gases and other pollutants to avoid reducing their own emissions by purchasing emission reductions in some far off place. This allows them to continue business-as-usual and avoid making the needed investments in pollution control equipment or switch to clean energy options. 49% of reductions under CA’s Plan may come from “offsets.” PSP, p. 37.
- “Offsets” of emissions reductions abroad means export of job opportunities and little or no health co-pollutant benefits in CA. “Offsets” also invite a host of problems that do not lead to “real, permanent, quantifiable, verifiable, enforceable, and additional” emissions reductions as required by statute. Phantom credits blow through any Cap on emissions, eradicating any certainty about meeting reductions targets.
- The impartial U.S. Government Accountability Office found that: “Congress may wish to consider the following lessons from the CDM: (1) that it may be possible to achieve the CDM’s sustainable development goals and emissions cuts in developing countries more directly and cost-effectively through a means other than the existing mechanism; (2) that the use of carbon offsets in a cap-and-trade system can undermine the system’s integrity, given that it is not possible to ensure that every credit represents a real, measurable, and long-term reduction in emissions; and (3) that while proposed reforms may significantly improve the CDM’s effectiveness, carbon offsets involve fundamental tradeoffs and may not be a reliable long-term approach to climate change mitigation.” [5]
- “The world’s biggest carbon offset market, the Kyoto Protocol’s clean development mechanism (CDM)... is intended to reduce emissions by rewarding developing countries that invest in clean technologies. In fact, evidence is accumulating that it is increasing greenhouse gas emissions behind the guise of promoting sustainable development. The misguided mechanism is handing out billions of dollars to chemical, coal and oil corpora-

tions and the developers of destructive dams—in many cases for projects they would have built anyway.” [6]

- A Mere Distraction. “All the so-called [CDM credits]... designed to keep 175 million tons of CO2 out of the atmosphere by 2012, will slow the rise of carbon emissions... [by] 6.5 days.” [7]
- Measurement. “[W]hen carbon is released into the atmosphere, it is part of the problem in terms of climate change, but the various carbon offset schemes are operating to supposedly neutralize these emissions over a much longer period of time, sometimes, as in the case of forestry offsets, over a period of a hundred years or more.” [8]
- Enforceability. “[W]here’s the guarantee that the tree planted in Bolivia to offset \$10 worth of air travel... won’t be chopped down long before it absorbs the requisite carbon?” [9]
- Fraud. “‘There is a high incentive’ for companies to put together environmentally questionable carbon-credit projects, ‘because there is a lot of money that can be earned...’” [10]
- “Additionality” test. “A working paper from two senior Stanford University academics examined more than 3,000 projects applying for or already granted up to \$10bn of credits from the UN’s CDM funds over the next four years, and concluded that the majority should not be considered for assistance. ‘They would be built anyway... It looks like between one and two thirds of all the total CDM offsets do not represent actual emission cuts.’” [11]

HFC and NO ₂ projects	40
Coal bed/mine methane	6
Fossil fuel switch	6
Landfill gas	9
Biogas	2
Biomass energy	7
Hydroelectric dams	7
Solar	0.05
Tidal	0.05
Wind	6
Geothermal	0.6
Other	16
TOTAL	100

Percent of Clean Development Mechanism (CDM) credits in the pipeline to 2012. [30]

Examples of Carbon “Offsets”

- “[T]he growing practice of purchasing carbon dioxide credits in order to ‘offset’ affluent consumers’ excessive greenhouse gas emissions is increasingly opposed by people on the receiving end. Carbon offsets, whether sold on the Internet or negotiated through the Kyoto Protocol’s Clean Development Mechanism, also favor the conversion of forests into monoculture plantations and further the displacement of traditional communities.” [12]
- “In November, the Democratic-led [US] House spent about \$89,000 on so-called carbon offsets... Some of the went to farmers in North Dakota, for tilling practices that keep carbon buried in the soil. But some farmers were already doing this, for other reasons, before the House paid a cent. Other funds went to Iowa, where a power plant had been temporarily rejiggered to burn more cleanly. But that test project had ended more than a year before the money arrived...” [13]
- “In China, almost every new hydroelectric and natural-gas-fired power plant has applied for CDM money, casting doubt on

whether they really require the offset revenue to be built. ‘It looks like the CDM is just turning into a production subsidy... and that’s not a good way to spend our money.’” [14]

- “In total, CDM-approved offsets have captured or destroyed the equivalent of 135 million tons of CO2 emissions worldwide... Yet an astounding 51 percent of those offsets have been generated by paying refrigerant manufacturers to incinerate HFC-23, an industrial byproduct and potent greenhouse gas, instead of spewing it into the atmosphere. The price of HFC-23 offsets can be worth more than twice the market price of the refrigerants themselves, which has had the unintended effect of encouraging refrigerant companies to produce (and then destroy) even more greenhouse gases in the name of eliminating them. The 43,000 tons of HFC-23 incinerated between 2003 and 2012 will generate \$6 billion worth of carbon credits, but cost just \$150 million to destroy... describe[d] as a massive waste of resources.” [15]

Western Climate Initiative (WCI)

- The WCI is a regional partnership that includes California, Montana, New Mexico, Oregon, Utah and Washington, as well as the Canadian provinces of British Columbia, Manitoba, Ontario, and Quebec (70% of Canada's economy), and several regions of Mexico as observers. The WCI will set-up a regional cap-and-trade system to include the Industrial, Electricity, Natural Gas, and Transportation sectors. If any one state, province, or region over-allocates permits, fails to set an appropriate cap, allows fraudulent credits, or falls subject to any of the myriad failures of pollution trading, that failure will weaken the entire system.
- On Sept. 23, 2008, the WCI published its "[Design Recommendations for the WCI Regional Cap-and-Trade](#)" program. WCI partners will each determine whether and how much they will allocate freely or auction permits, with an initial minimum **10% auction of permits** (meaning potential windfall profits of 90% in some cases), and 25% by 2020. 100% auction is a merely a "worthwhile goal." PSP, p.36.
- The WCI Partners "will limit the use of all **offsets**, and allowances from other from other GHG emission trading systems that are recognized by the WCI Partner jurisdictions, to no more than **49%** of the total emission reductions from 2012-2020... WCI Partner[s] may approve and certify offsets projects located throughout the United States, Canada, and Mexico... WCI Partner jurisdictions may accept offset credits from developing countries through the [CDM] of the Kyoto protocol." WCI, p.10-11.

Regional problems of Monitoring & Enforcement:

- The Plan states, "As a result of trading, emissions in a state may vary from its allowance budget, although total regional emissions will not exceed the regional cap." P.34. Meaning that CA may not meet its Cap. The Plan also admits, "a multi-sector, regional ca-and-trade program would bring unique enforcement challenges." P.110.
- A federal district court recently struck-down a regional pollution trading program to regulate NOx and SOx under the Clean Air Act in *S. Carolina v. U.S. EPA* because the states cannot be sure where the reductions will happen. "[F]or those who have pressed for a cap-and-trade system for carbon credits, the collapse of the US market for what are called SOx (sulphur dioxide) and NOx (nitrous oxide) allowances is very bad news. The envi-

Carbon Capture & Storage (CCS)

- The Plan justifies its policy approach in part, by stating, "This cap and trade approach... avoids the danger of having government or other centralized decision-makers choose specific technologies, thereby limiting the flexibility to allow other options to emerge on a level playing field." P.18. If the stated primary purpose of the Plan is to "maximize technologically-feasible emissions reductions," p. 73, then CARB should be required to prefer and incentivize the lowest-carbon and safest technologies available. Yet, the Plan "expresses support for near-term development of sequestration technology" and to ensure that credit will be provided for CCS projects. P.ES-5; 117. "[O]ther strategies to mitigate climate change, such as carbon capture and storage (underground geologic storage of carbon dioxide), should also be further explored." P.9. CCS technologies, and CARB's support for such projects, are problematic for several reasons:

ros... don't seem to realize that the risk management committees that have the last word at most corporations will be inclined to deny commitments to pollution allowance trading, including carbon. After all, the last time anyone tried that, they lost a lot of money to an unexpected court decision." [16]

"Free Markets" aren't magic:

- The Plan alleges that a cap-and-trade program that links with other WCI partner programs "will lead to prices on [GHG], prices that will spur reductions in [GHG] emissions throughout the California economy, through application of existing technologies and through the creation of new technological and organizational options." P.18. Yet the Plan does not give any indication how an effective price will be achieved, nor does it address any of the evidence from all of the pollution trading programs previously tested that indicate to the contrary. The free market is simply magic.
- "If we cannot trust financiers with something as apparently straightforward as the housing market, why should we imagine they can triumph at controlling global pollution?... It is also far from clear that carbon trading will benefit the climate in the long term. By reducing the short-term costs of cutting emissions it could be undermining research and development into the low-carbon and energy-efficient technologies without which the problem will never be properly solved. Bizarrely, no one has thought to address this issue." [17]
- "In general, it is not surprising that emission trading discourages innovation. The whole point of spatial flexibility is to encourage use of all cheap means before turning to expensive ones." [18] By prioritizing the "cost-effectiveness" (cheapness) of making emissions reductions for regulated entities, pollution trading schemes inherently undermine the expensive investments needed to make a genuine transition to clean energy. Under such schemes, billions of dollars will be diverted towards diffuse "offset" projects the world over (justifying continuing business-as-polluted-usual locally), versus crafting a comprehensive plan to rapidly develop and deploy renewable sources of energy, develop green jobs and enable cleaner air locally, and have any hope of realizing long-term goals to address climate change.

- A large leak of CO2 could kill vegetation, animals, and humans over a fairly large area. Thus, the siting of CCS demonstration projects in traditionally overburdened communities (such as the project proposed near Bakersfield) violates AB32's statutory mandate not to disproportionately impact traditionally overburdened communities.
- There is no proof that such projects will result in permanent and verifiable CO2 reductions. No one can guarantee that CO2 buried in the ground will stay put forever. Even very low leakage rates could reverse the climate benefits achieved by CO2 burial.
- CCS cannot deliver in time to avert climate chaos, diverts billions of needed investments in low-carbon technologies, and provides a false hope that continuing business-as-usual will be fine. [19]

Economic Evaluation

- The Scoping Plan concludes that implementation will “have a net positive effect on California’s economic growth through 2020.... The positive impacts are largely attributable to savings that result from reductions in expenditures on energy.” P.74-75. However, the future energy cost savings are expected from direct measures such as energy efficiency programs, transportation plans, and existing federal and state policies (which are excluded from the comparison Business-As-Usual forecast case.) P.74.
- The economic evaluation does not model the actual economic impacts of variable prices in a trading program, rather, inputs a *maximum* price of \$10 per ton of carbon under a cap-and-trade program. This price input and any resulting conclusions are problematic for several reasons: 1) the volatility of price in a carbon market could far exceed \$10 per ton particularly considering that energy availability and need for credits is subject to erratic forces such as weather. 2) A maximum price of \$10 per ton is not likely high enough to cause changes necessary to reduce GHG emissions significantly.

Putting a price on carbon + trying to make it as cheap as possible = little to no reductions

- “Of the 65% of companies surveyed by Point Carbon earlier this year [2007] which claimed that the ETS had led them to abate their emissions (up from 15% the previous year), most were planning to buy credits rather than cut their own emissions....European emissions overall are not falling, which suggests there may not be as much switching out of coal, or as much technological innovation, as had been hoped. Chinese CERs are too cheap and the carbon price is too low and too volatile. Even when it was bouncing around at €15-25, it did not seem to encourage much new investment.” [20]
- The economic evaluation does not even attempt to compare the economic consequences of different policy options (e.g. cap-and-trade versus a carbon fee or direct controls.) Others have concluded:
- The impartial Congressional Budget Office concluded that a “given long-term emission-reduction target could be met by a tax at a fraction of the cost of an inflexible cap-and-trade program.” [21]
- Economists at the conservative American Enterprise Institute warned, “a severe global emissions-reduction policy through emissions trading (on the order of a minimum 50 percent cut by 2050) could turn out to be costliest public policy mistake in human history...” [22]
- “Even a back-of-the-envelope calculation suggests that the EU’s ETS is far from being the most cost-effective way to reduce net carbon emissions. Adding up simply the transfer cost and the administrative cost suggests a cost to the UK economy of £530 million a year (without including the knock-on costs of higher energy prices.) This is unacceptably high, given that there is no evidence that the scheme is actually limiting emissions across the EU... One way or another, the administrative costs of the current trading scheme means that the same objectives could be achieved at lower cost with... targeted action on power generators.” [23]

“[E]xcessive volatility or unduly high prices of quotas on carbon emissions might disrupt the economy severely...”
“ [24]

Public Health Evaluation

- The Scoping Plan purports that implementation of the recommended measures “will reduce statewide oxides of nitrogen (NOx), volatile organic compounds (VOC) and atmospheric particulate matter (PM) emissions primarily due to reduced fuel consumption, with resulting public health benefits.” P.73. “The analysis of this plan is focused primarily on the quantification of public health benefits from air quality improvements that would result from implementation.” P.86. The air quality improvement estimates come from a combination of existing and proposed direct regulations, such as the Goods Movement Efficiency Measures, RPS, etc., and specifically “does not include the criteria pollutant co-benefits of additional [GHG] reductions that would be achieved from the proposed cap-and-trade regulation because we cannot predict in which sectors they would be achieved.” P.88n.66.
- The evaluation does not even attempt to analyze any public health effects under a cap-and-trade program, when experience has proven under the RECLAIM program in Los Angeles that pollution trading created and exacerbated pollution “hot-spots” in disproportionately impacted communities. Rather, the Plan assumes that CARB will “design the program to prevent any increase in emissions” and “ensure that the measures have undergone the aforementioned screenings and meet the requirements established...” P.106.
- The public health evaluation does not compare the public health co-benefits from overall policy options (e.g. between a cap-and-trade, carbon fee, or purely direct regulation programs.) Nor does the evaluation attempt to identify the foregone public health benefits by allowing, for instance, 49% of reductions to come from international offsets abroad.
- **Statewide Analysis:** “To the extent feasible, ARB quantified estimated emissions reductions in criteria pollutants associated with each recommended measure except cap-and-trade.” P.91. By excluding the cap-and-trade program in the public health analysis, CARB’s evaluation treats the program as if it were purely direct regulations, ignoring their juggernaut policy choice of pollution trading that will cover 85% of all of the GHG sources of emissions in CA.
- **Wilmington Community-Level Assessment:** Assumes a 10% reduction in fuel combustion as a result of non-source specific program elements including cap-and-trade, but admits that “The reductions at any one facility could be much greater or lesser than 10 percent. For example, very small or no reductions might occur...” P.93n.70. Even with the 10% estimate, “a majority [80%] of the health benefits are expected to occur in areas outside of the Wilmington community.” P.93.

An Alternate Plan:

Cap-and-Fee:

- Cap on greenhouse gas emissions. California already adopted a Cap. Keep the cap—ditch the trade.
- Carbon Fee. A market mechanism (versus creating an entirely new free market under a trading program), to address the relatively low cost of fossil fuels as compared to clean energy. The Plan proposes a similar “mitigation fee” to regulate High-GWP gases, p.59-60, but does not consider a fee to help regulate carbon. A fee could be gradually phased-in on all fossil fuels at the first point of sale following import or extraction. A fee is simpler, and sends a clear and transparent price signal allowing regulated entities to plan ahead and make investments to transition towards clean energy. Under California case law, a carbon fee may be imposed as long as use of the revenue generated has a “substantial nexus” to the purpose it was imposed. [25] Whereas, “auction” revenue generated under a cap-and-trade program could be challenged as a “tax” that requires a 2/3 majority vote by the CA legislature.
- Broad-based support for a Carbon Tax (or Fee): Al Gore, James Hansen, and other leading climate change experts have all called for a carbon tax, versus a trading system. “Most economists consider a carbon tax a more effective instrument...” [26]

Direct Rules, Regulations & Incentives:

- “The primary purpose of the Scoping Plan is to develop a set of measures that will provide the maximum technologically feasible and cost-effective [GHG] emission reductions.” P.73. A majority of emissions reductions anticipated from the PSP will come from direct rules and regulations. It is therefore imperative that the overlying policy approach works to help achieve the goals of the regulations, such as aggressive (and expensive) renewable energy mandates. Carbon trading works against actualizing aggressive renewable goals because it potentially diverts 49% of investments towards diffuse global “offset” projects. If consumers ultimately receive the bill for such investments in higher energy and product costs, the public should demand a program that actually works together and not against itself. Examples:
- Renewable Portfolio Standard (RPS) - 33% by 2020; 80% by 2050
- Feed-in Tariff (FIT) to enable expansion of rooftop solar energy
- Diesel & High Global Warming Potential (GWP) gases regulations
- Agriculture regulations
- Waste management initiatives
- Transportation & Land Use plans
- Industry regulations, etc.



Our Present choices will shape the future for every generation to come.

Endnotes:

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