

**Comments to the California Air Resources Board
From the California Independent Petroleum Association
Regarding the Cap and Trade Program Plan
Submitted August 11, 2011**

The California Independent Petroleum Association respectfully submits the following comments on the Proposed Cap and Trade Program Plan.

The mission of the California Independent Petroleum Association (CIPA) is to promote greater understanding and awareness of the unique nature of California's independent oil and natural gas producer and the market place in which he or she operates; highlight the economic contributions made by California independents to local, state and national economies; foster the efficient utilization of California's petroleum resources; promote a balanced approach to resource development and environmental protection and improve business conditions for members of our industry.

CIPA appreciates the opportunity to submit the following comments to the California Air Resources Board (CARB) for its consideration. The members of CIPA believe that domestic petroleum production already plays a meaningful role in helping the state meet its policy goals for reducing greenhouse gas emissions in California.

Moreover, CIPA and its members stand ready to do their part, to the extent practicable, to reach further reductions. But it is important to keep in mind that California oil and gas production already faces the most rigorous environmental regulation in the industry both nationally and internationally. As a result, California oil and gas production should be expanded to fully capture the environmental benefits of the regulatory regime in this state because until we have large scale alternative energy sources, California production is more

environmentally sensitive than imports, and the transportation necessary to facilitate the imports, often produced with little or no environmental regulation.

I. On the Nature and Scope of a Cap and Trade Program

As we wrote a year ago in our comments on the adoption of the Cap and Trade Program, from the text of AB 32: “National and international actions are necessary to fully address the issue of global warming. However, action taken by California to reduce emissions of greenhouse gases will have far-reaching effects by encouraging other states, the federal government, and other countries to act.”¹

Unfortunately, the “encouragement” has fallen far short of far-reaching. The global nature of climate means that action by California alone will do little to address the issue. Nevertheless, the situational political winds dictate the likely design and timing of climate policy here in our own little portion of the globe.

While other regions have reconsidered their GHG policy responses, California has begun to implement policies aimed at achieving AB 32’s 2020 GHG targets, with its cap-and-trade system scheduled for implementation in 2012, albeit with a “soft-start.” As a result, California will begin its cap-and-trade system without the commensurate participation it had hoped to stimulate from neighboring political subdivisions and the federal government, which in turn will have major consequences likely resulting in a range of negative economic impacts on California businesses.

It cannot be stated strongly enough: meaningful global action to limit atmospheric concentrations of GHGs can only be achieved through broad action taken across all major global economies. But in the absence of global action, an integrated market-based national policy is the most rational approach to cost-effective,

¹Health and Safety Code §38501(d) as added by Chapter 488, Statutes of 2006.

meaningful emissions reductions that can overcome the adverse impacts of leakage, volatility, risk and cost. Further, an integrated market-based national program also provides the most *environmentally effective* approach to achieving GHG targets at the least economic cost because there is no opportunity for domestic emissions leakage.

Climate policy limited to California will be less environmentally effective and have greater economic impacts than comparable efforts implemented within a national cap-and-trade system or even a broad regional system if one were to actually come together with enough participants to make it meaningful and not cost prohibitive to its participants.

Given the limited likely effectiveness of a California only program, CIPA believes that it is only under a federal program that policies that can mitigate adverse economic and environmental consequences should be pursued and the current effort under way at the Air Resources Board is a costly exercise² that we hope will never be fully realized on the limited geographic basis currently contemplated. To do otherwise would be to embark on a mission that will yield little to the environment at great cost and disadvantage to the state's economy.

Yet, despite the peril inherent in a California only scheme, CARB presses forward with Cap and Trade notwithstanding a flawed design, notwithstanding having already actually met the emissions reductions called for under the authorizing legislation, notwithstanding the failure of the Chicago Climate Futures Exchange and in the face of litigation by forces that would overtake the climate change policy process for their own social ends.

² CIPA members are subject to the Administrative Fee that underwrites CARB climate policy activities and therefore footing the bill for a system that we hope will never be implemented.

II. Cap and Trade litigation requiring a further alternatives analysis under CEQA coupled with concurrent, independent LAO report to Legislature reveals surprise: Program goals met and no market mechanism is needed to fully achieve the GHG emissions reductions required by AB 32.

Ironically and tellingly, it wasn't business interests who drew first litigation blood over the *landmark* legislation, Assembly Bill 32³. In currently pending litigation, a California State trial court found that the analysis of the alternatives identified in the FED was not sufficient for informed decision-making and public review under CEQA. The *Association of Irrigated Residents, et al, v. California Air Resources Board, et al.*, (San Francisco Superior Court, Case Number CPF-09-509562) challenged CARB's implementation of AB 32 as a *post hoc* rationalization of predetermined policy approaches. Under the abuse of discretion review taking place, a Supplement was prepared to provide an expanded analysis of the five project alternatives discussed in Section V of the 2008 Scoping Plan FED (CARB 2009).

The Supplement provides a revised analysis that, if approved by the Court and the Board, will supersede and replace the project alternatives section of the FED. The proposed supplement contains a new Proposed Scoping Plan, which purports to outline the same objectives and framework for GHG reduction as the 2008 Scoping Plan; however this Supplement relies on emissions projections updated in light of current economic forecasts (i.e., accounting for the economic downturn since 2008).

The measures in the Proposed Scoping Plan we are told were developed to reduce GHG emissions from key sources and activities while improving public health, promoting a cleaner environment, preserving natural resources, and ensuring that the impacts of the reductions are equitable and do not disproportionately impact low-income and minority communities.

³ Chapter 488, Statutes of 2006

CIPA argues that CARB has met all of these objectives *and the emissions targets* through Alternative 5 of the Supplement- Variation of the Combined Strategies or Measures⁴. One need only eliminate cap and trade from that mix because the emissions reduction yield from cap and trade was always a “plug” number anyway, that is, a number to plug in to get to the evolving target, a catch all buffer in case actual reductions didn’t materialize as projected. Cap and trade’s inclusion was a sop to business and lip service to those who believe that credit trading was the foundation for a “green economy.” More importantly, a Combined Strategies alternative that does not include cap and trade also does not constitute a No Project designation, which is a political non-starter.

But as the landscape has changed through other GHG reduction policy measures, executive orders, land-use decisions, adoption of complementary measures, federal action and economic circumstance, the plug number has been virtually reduced to a *de minimus* amount. It is time to recognize this fact, and in so doing ease the conscience of the environmental community who believes cap and trade to be an artifice as well as to let the business community during these very unsettled economic times instead focus on commercial recycling and large scale industrial efficiency investments instead of risky unproven market mechanisms that as we will discuss further ahead are ripe for fraud and abuse according to trusted government accountability sources.

The largest single impediment to the rational policy decision to jettison cap and trade and instead rely on the established mix of combined strategies and measures is CARB’s desire to construct the mix of measures in such a fashion that the target reductions are skewed higher than necessary to meet AB 32 goals because of a desire to put California on a path to meet the long-term 2050 goal of reducing California’s GHG emissions to 80 percent below 1990 levels because CARB believes this trajectory is consistent with the reductions that are needed globally to

⁴Supplement to the AB 32 Scoping Plan Functional Equivalent Document; §2.7 at pp. 102

help stabilize the climate. CIPA argues that this scale is unachievable at the state level and that this policy horizon is too long for rational development of midterm solutions and is in practical effect the enemy of the good.

Nevertheless, in CIPA comments on Supplement to AB 32 Scoping Plan Functional Equivalent Document, dated July 28, 2011, we noted that the FED Supplement fails to provide an accurate baseline because the GHG reductions attributable to other programs are underestimated or omitted and the effects of the economic recession on statewide GHG emissions have been underestimated.

Specifically, we argued that the FED Supplement does not include the GHG reductions associated with two measures that CARB has already adopted or is adopting, namely the Commercial Recycling Measure and the Energy Efficiency And Co-Benefits Assessment.

Moreover, we pointed out that the FED Supplement does not include any of the GHG reduction programs that CARB has proposed but not yet adopted. CARB has estimated that the GHG reductions attributable to those measures total 68 MMT exceeding the 22 MMT shortfall. Yet, CARB provides no analysis in the FED Supplement as to the foreseeability of these measures or the likely effect those measures will have on achieving the AB 32 target.

Insofar as the FED Supplement ignores GHG reduction programs implemented or under development by the federal government and other state agencies such as the California Public Utilities Commission we noted that the baseline has been skewed. Even though CARB states in the FED Supplement that it has updated the environmental baseline to account for events subsequent to the original FED prepared for the Proposed Project, CARB has not included these programs in its updated baseline. As a result, CARB's updated baseline is inflated and overstates any shortfall in achieving the AB 32 target. Indeed, proper accounting for these omitted programs could exceed the 22 MMT shortfall estimated in the Supplemental FED.

Although the FED Supplement states that it has updated the environmental baseline by accounting for the effects of the recent economic recession on state-wide GHG emissions, there is no explanation, let alone any quantitative analysis, as to how CARB accounted for those recessionary effects. Indeed, the only information provided in the FED Supplement on this issue is a conclusory statement that CARB relied on the energy demand forecast provided in the 2009 “IEPR” prepared by the California Energy Commission (CEC). Yet, in findings issued in March 2011 – before the publication of the FED Supplement – the CEC acknowledged that its 2009 forecast substantially under predicted the depth and duration of the recession. Accordingly, CARB’s baseline of GHG emissions is significantly overstated.

CIPA asserts, again, that CARB has met all of the AB 32 objectives *and the emissions targets* through Alternative 5 of the Supplement- Variation of the Combined Strategies or Measures. One need only eliminate cap and trade from that mix to arrive at a Combined Strategies Alternative that satisfies AB 32.

But wait, for more, equally compelling substantiation of the conclusion that Alternative 5 of the Scoping Plan FED Supplement *sans* the cap and trade portion meets the requirements of AB 32 we need look no further than the Legislative Analyst’s Office in their letter to Legislative Leaders dated June 9, 2011.

In the LAO letter they provided Figure 1 below, a comparison of the 2008 Scoping Plan targets and the 2010 estimates which are based upon CARB’s updated economic analysis. The column in the figure entitled “Original 2008 Scoping Plan Target” summarizes the categorical targets for GHG emissions as reflected in the final Scoping Plan adopted by CARB in December 2008. The overall GHG emission reduction target, as well as those associated with many individual measures, have since been adjusted downward by CARB. These downward adjustments reflect the

revised economic assumptions used by CARB last year in conducting its updated economic analysis of the Scoping Plan. (Other, more technical, downward adjustments have also been made to the overall emission reduction target.) The column entitled “2010 Updated Analysis Target” lists these updated emission reduction targets.

Figure 1
Scoping Plan’s Greenhouse Gas (GHG) Emissions Reduction Measures
(GHG Emissions in MMTCO₂E)

Category of Measure	Original 2008 Scoping Plan Target	Updated 2010 Analysis Target
Low carbon fuel standard	15.0	15.0
Large industrial sources: direct regulation	1.4	—
High global warming potential gases	20.2	6.5 ^a
Energy efficiency	26.3	12.0 ^a
Renewables portfolio standard (RPS): ^b		
20 percent RPS and 33 percent RPS	21.3	—
33 percent RPS	—	11.4
Perky standards: ^c		
Perky 1 and Perky 2	31.7	—
Perky 2	—	5.3
Other measures	23.7	13.3 ^d
Cap-and-trade	34.4	13.0
Totals	174.0	80.0

^a Target includes measures under this category which have not been updated. Therefore, the updated total target for this category does not reflect all measures identified in the 2008 Scoping Plan.

^b Updated baseline now includes 33 percent RPS. Therefore, 2010 target only reflects 20 percent RPS.

^c Updated baseline now includes Perky 1. Therefore, 2010 target only reflects Perky 2.

MMTCO₂E = millions of metric tons of carbon dioxide equivalent.

Legislative Leaders also posed the following question: *The Scoping Plan was written and adopted just prior to the state’s economic decline in the latter part of the decade. Were there assumptions made regarding the emissions produced and reduced that are no longer valid based on the current state of the state’s economy?*

And they received the following answer:

Answer: Yes, as has been explicitly recognized by ARB, some key assumptions about GHG emissions made by ARB in the 2008 Scoping Plan are no longer valid. In light of the impact that the downturn in economic activity had on the current and forecasted level of GHG emissions, the ARB updated its Scoping Plan economic analysis, which was then used in the development of its cap-and-trade regulation. As part

of this update, the ARB reexamined the assumptions used in the Scoping Plan and made adjustments to the 2020 emissions baseline as well as to emission reduction targets associated with individual measures. The state's overall goal for 2020—a reduction of emissions to the 1990 level of 427 MMTCO_{2e}—is unchanged. However, the total emission reductions required to be made from the 2020 emissions baseline (the “business-as-usual” scenario) to meet that goal will be far lower than the level that ARB originally had assumed because of the changed economic circumstances and because of other adjustments that we discuss below.

The original 2020 emissions baseline identified in the 2008 Scoping Plan—that is, the amount of emissions that were projected to occur in 2020 absent adoption and implementation of the Scoping Plan measures—was 596 MMTCO_{2e}. The ARB has since made two major sets of adjustments to the 2020 baseline. First, it incorporated into the 2020 baseline, correctly from our point of view, the planned GHG emission reductions from other legislation that predated AB 32—Pavley 1 and the 20 percent renewables portfolio standard (RPS). (These two measures accounted for about 38 MMTCO_{2e} of emissions reductions in the original Scoping Plan.) Then, the ARB lowered the 2020 baseline—ultimately to 507 MMTCO_{2e}—to account for the fact that the reduced level of economic activity also has had the effect of reducing GHG emissions. *These two sets of ARB adjustments mean that the total amount of emission reductions required from the 2020 emissions baseline is now about 80 MMTCO_{2e}, instead of the 174 MMTCO_{2e} emission reduction target that had originally been identified in the 2008 Scoping Plan.*

As noted in the ARB's cap-and-trade rulemaking documentation, the ARB has new and generally lower emission reduction targets for many of the individual Scoping Plan measures. As noted previously, Figure 1 shows the emission reduction targets for the individual measures before and after the baseline adjustments discussed above.

A couple of points from the figure are worth highlighting. First, you should note that the total level of emission reductions anticipated to come from cap-and-trade under the updated 2010 analysis is roughly one-half the level assumed under the original 2008 Scoping Plan. This is because the amount of emission reductions estimated from cap-and-trade reflects a “plug number” to make up the difference between emission reductions achieved through so-called complementary measures (involving direct regulatory mandates) and the overall 2020 target. When the over-all 2020 target was adjusted significantly downward, so was the amount of the solution assumed to come from the cap-and-trade regulation.

Second, you should note that the ARB has not yet updated the level of emission reductions that would result from a number of Scoping Plan measures, such as the measure to increase combined heat and power use to 30,000 GWh. In the original 2008 Scoping Plan, ARB had assumed that these measures would collectively provide roughly 20 MMTCO_{2e} of emission reductions. However, these measures are not scored in the updated 2010 estimates. When and if estimates of the effects of these measures are updated, they would not provide that same amount of

reductions as estimated in 2008, reflecting a lower level of economic activity than had previously been assumed.

Thus, the ARB's updated estimates potentially overstate the targeted level of emission reductions that will be required from the cap-and-trade measure. This is because the complementary measures, when comprehensively updated and scored, are likely to provide a higher total level of emission reductions, thus lowering the estimate of the emission reductions required from cap-and-trade.

The Analyst then went to great length to warn of the potential for market or program manipulation in the various carbon markets that they believe would develop under the contemplated scheme. They also warned in detail that the capacity for governmental oversight to detect and reduce such gaming potential will likely vary by market, but that the state's capacity to oversee the spot market is of particular concern.

Concerns over the experience of the electricity sector crisis a decade ago by those in the regulated community should not ring hollow with CARB and particular attention should be paid to the analysis of potential market manipulation by the Analyst. CARB ignores this analysis at its own peril.

Finally, when asked if there was a scenario by which CARB could meet the AB 32 Global Warming Solutions Act 2020 emission reduction targets without cap and trade, the LAO provided several options. Two of these options provide emissions reductions that surpass the cap and trade reductions by far, if only CARB would acknowledge and carry out.

Update and Include All Measures That Were Originally Included in the Scoping Plan. Again, from the LAO letter to Legislative Leaders: "Key assumptions made by CARB in the 2008 Scoping Plan about GHG emissions are no longer valid. In light of the impact that the downturn in economic activity had on the current and forecasted level of GHG emissions, CARB updated its Scoping Plan economic analysis, which was then used in the development of its cap-and-trade regulation. As part of this update, CARB reexamined the assumptions used

in the Scoping Plan and made adjustments to the 2020 emissions baseline (the “business-as-usual” scenario) as well as to many, but not all, of the emission reduction targets associated with individual measures. The total amount of emission reductions required from the 2020 emissions baseline is now about 80 million metric tons of carbon dioxide equivalents (MMTCO_{2e}), instead of the 174 MMTCO_{2e} emission reduction target that had originally been identified in the 2008 Scoping Plan. (This downward adjustment reflects both the changed economic circumstances and other adjustments.) “

The Analyst noted that cap-and-trade emission reduction target has been cut roughly in half, “reflecting the fact that cap-and-trade serves to fill the gap between the total emission reduction target and the emission reductions planned from the various direct command-and-control regulatory measures” (the so-called “complementary measures”).

As noted earlier, the ARB has not updated *all* of the 2008 Scoping Plan measures to reflect the changed economic circumstances. Measures that have not been updated—such as the measure to increase combined heat and power use to 30,000 gigawatt hours (GWh)—collectively provide roughly 20 MMTCO_{2e} of emission reductions in the 2008 Scoping Plan. However, in developing its revised total emission reduction target of 80 MMTCO_{2e} (which was then used as the basis for the cap-and-trade regulatory development), the ARB assumed for scoring purposes that *no* emission reductions whatsoever would come from these yet-to-be-updated measures. However, in our view, this is an unreasonable assumption, given that the measures that have yet to be updated have not been taken off the table. Although potentially providing a reduced level of emission reductions than originally planned, they will likely be operative to at least some degree. Accordingly, ***ARB has potentially significantly overstated the targeted level of emission reductions that will be required from the cap-and-trade measure to fill the gap between the total emission reduction target and the emission reductions planned to come from the complementary measures.***⁵

Therefore, as at least a partial alternative to cap-and-trade, the ARB could more fully account for the emission reductions from Scoping Plan measures that it has yet to update.

Quantify Scoping Plan Measures That Have Never Been Assigned an Emissions Reduction Target. In the 2008 Scoping Plan, ARB included several measures that it

⁵ Emphasis added.

(1) did not quantify or (2) quantified but did not count toward the overall 2020 emissions reduction target. Examples of the latter include the state’s “green building” measures as well as the state’s commercial recycling program, both of which may result in significant GHG emission reductions. Figure 2 provides a list of all measures which were not quantified or counted toward the overall 2020 target. These measures are estimated to collectively provide a substantial amount of GHG emission reductions—totaling over 44 MMTCO₂e. The Analyst noted that due to the fact that these measures have yet to be updated, they will potentially provide a reduced level of emission reductions than originally planned, but coupled with the recommended update above are sufficient to render the cap and trade scheme unnecessary.

Figure 2
Measures Referenced in Scoping Plan But Not Counted Toward 2020 Goal
(Greenhouse Gas [GHG] Emissions in MMTCO₂e)

Measure	Estimated GHG Reductions
Energy efficiency audits for large industrial sources	—
Commercial recycling	5
Methane capture at large dairies	1
Forest conservation, afforestation/reforestation, urban forestry	2
State government	1.5
Increased renewable energy production (power sector)	0.5
Water system energy efficiency	2
Increased production and markets for compost	2
Anaerobic digestion	2
Environmentally Preferable Purchasing program	Unrecoverable
Green buildings	29
Water use efficiency	1.4
Fluorocarbon runoff	0.2
Water recycling	0.5
Total	44.3

MMTCO₂e = million of metric tons of carbon dioxide equivalent.

III. While a departure from original CIPA policy that favored the flexibility a market system could provide, CIPA policy has undergone Adaptation to account for factor 1) emissions reductions achieved, obviating need for elaborate market system; and factor 2) flawed market design that will cause economy wide harm

While CIPA began the climate change policy journey with a position that market mechanisms most efficiently provide for compliance flexibility the evolution of our position has been influenced by two irrefutable factors. First are the emissions numbers. We have just covered exhaustively analysis done by the LAO on the original and updated Scoping Plans, the economic analysis done and updated to reflect current economic circumstances and reached the conclusion that enough activity has been undertaken, numerous programs and policies put into place that coupled with dramatically reduced economic output have allowed us to achieve, or at least establish the glide path to the emission reduction targets envisioned by the framers of AB 32. CARB should take credit for this achievement and the mountain of work performed to accomplish it.

Second, we look at the market design features of the currently proposed program and inherently understand that no matter how well intentioned they portend disaster for the economy as a whole and regulated entities specifically. Having lived through the energy crisis of 2000-'01 we are keenly aware that unintended consequences can ruin a business before the government agency that caused the problem can come up with a fix. We concur with the following concerns raised by Cantor CO2e

Credits

No Multi-year Allocations – Section 95910

CARB is only issuing allowances on a one year forward basis and not multiple years, creating uncertainty for financial and capital planning purposes. In addition, CARB is only auctioning off current year allowances and two year-ahead allowances, instead of multiple years of allowances. Sources advocate that CARB follow the Acid Rain and RECLAIM program examples whereby sources were issued and allowed to trade multiple years of credits.

No Ability to Use Allowances and Credits that Result from Shutdowns or Curtailments – Section 95891, (4) Facility Closures

CARB continues to resist any efforts to credit shutdowns that will happen separately or as a result of AB 32 implementation.

In establishing the benchmark for credit allocation to oil and gas production we have encountered issues that remain unresolved. For example, there exists an apparent erroneous bin assignment under CARB's proposed Heavy/Light Crude Oil approach. This subjective assignment will serve to skew the data for both categories causing unintended consequences for both categories of crude.

Moreover, split field designation using a 50% approach for mixed fields is technically inaccurate and would lead to inappropriate and largely inaccurate benchmarks.

Despite meeting with staff, and outlining the potential fallout from these inaccuracies, we are still unsure if and how corrections might be made to the final draft. We are further concerned about how CARB will be verifying accuracy of benchmark at the onset of the program and going forward and we wonder how CARB will monitor the accuracy of the benchmark in the future (especially in consideration of difference between the MRR facility definition and what is conventionally used in California).

We are confused by and request more definitive basis for electric ratepayer

compensation in the allocation determination. Will compensation exist for both residential and commercial users? How will the compensation program work?

Despite the rhetoric of the Sierra Club, the oil and gas sector is part of a complex world marketplace with prices set beyond the control of any market player or government for that matter. Actions in the regulatory sphere have the distinct possibility of acute leakage if not handled properly. As noted, California production is subject to the highest levels of environmental review and oversight. If the AB 32 regime gets it wrong and skews the economics of domestic production it will lead to widespread curtailment of domestic production, which in turn, will lead to increased use of imported crude feedstocks, crude produced under less stringent environmental controls.

Leakage remains a distinct possibility from the sector considering the considerable uncertainty posed by the development of a California only cap and trade regime.

Offsets

Offsets continue to be the demilitarized zone. Seen by the environmental justice community as the root of all evil and by the regulated community as the difference between survival and failure in a supply/demand imbalance market situation as well as a liquid instrument that can save operations if credits or physical reductions are unobtainable.

We believe that the level of assault from the environmental and environmental justice communities will never allow CARB to fully utilize Offsets to the degree that would ever give the regulated community any comfort. We lament the lack of approved protocols for offset development, the convoluted fractions of fractions of compliance obligations allowed to be met through the use of offsets and their general politicization by those with radical environmental agendas. Just some of the problems surrounding offsets include:

Buyer Liability – Section 95985

The buyer offset liability language is problematic because buyers suffer sanctions or must replace credits that, though approved by CARB, later turn out to be invalid. The net effect will be higher offset transaction costs than need be; programmatic compliance costs will be higher; existing, standard seller liability used in all other cap and trade programs in the US and EU will be duplicated; offsets we be judged by the market to be second class compliance instruments; faced with higher costs, sources on the margin will expand their operations and/or export jobs outside the jurisdiction of AB32

IV. Adaptation as policy response rather than political motivation and/or irrational commitment to early most favored program.

Assembly Bill 32 was adopted during the heady days of *An Inconvenient Truth* and Nobel Prizes; a time when Global Warming iconography was everywhere, with loops of footage showing calving glaciers, lone polar bears on isolated ice flows and smoke stacks. The hockey stick graph purported to show temperature correlation with industrial activity and there was the urgent belief that we were at 280 parts per million CO₂ in the atmosphere and if we got to 340 ppm there would be no turning back. And we have tempered the exuberance that led the Intergovernmental Panel on Climate Change (IPCC) in their Fourth Assessment to over-politicize the issue- a prime example of which was to assign a higher GWP for Methane than was generally accepted. But today our understanding of climate change has evolved and we even speak about it as climate change instead of global warming.

Likewise, our understanding of climate policy has evolved as has our approach to its implementation, which is likely today to be more proactive than punitive. We speak more of adaptation and less of command and control. We speak about possible solutions that can be implemented within and across state agencies to

promote resiliency. This is the first step in an ongoing, evolving process to reduce California's vulnerability to climate impacts.

CIPA submits that it is time to adopt Adaptation as policy response. That is, adapt our policy to the evolving circumstance. Do not hold fast to what at one time was thought to be the proper course of action when it becomes clear that it no longer makes sense to do so. When market design, controversy, uncertainty and shifting political will all point to a way less bridled by the politics of the old do not be afraid to accept that what has been done to date is sufficient to establish a glide path to our 2020 target. Do not be afraid to accept that CARB has met all of the AB 32 objectives *and the emissions targets* through Alternative 5 of the Supplement- Variation of the Combined Strategies or Measures. One need only eliminate cap and trade from that mix to arrive at a Combined Strategies Alternative that satisfies AB 32 and avoids the pitfalls that await an ill-defined market plan and does not suffer the credibility gap of a take no action alternative.

We urge you to embrace adaptation as a policy response, fully count the Combined Measures and Strategies taken to date and jettison the dangerous California only cap and trade rule.