

To: The California Air Resources Board (ARB) From: Element Markets, LLC RE: AB32 Cap and Trade Regulations Date: August 11, 2011

Element Markets, LLC (EM) is a leading developer and operator of pipeline biogas (biomethane) projects throughout the United States. The company develops, owns, and operates landfill gas to energy projects as well as the Huckabay Ridge Anaerobic Digestion Facility, which is the largest privately owned anaerobic digester in North America. The company has in-house trading expertise in the renewable natural gas, greenhouse gas, renewable energy and emissions credit markets which it utilizes to provide structured environmental compliance and optimization services to corporate and institutional clients. Energy Risk Magazine recognized the company in 2010 and named it "Emissions House of Year" for its achievements in the environmental markets.

ARB has already recognized the crucial contributions that biomethane and biogas can make in reducing California GHG emissions by providing carbon neutral electricity, heat and transportation fuel. We appreciate that emissions from these sources are exempt from a compliance obligation in the cap and trade regulations. However, a few modifications to the existing draft language would further support the creation of a robust market for pipeline biogas resources within the state and provide a key compliance option to California operators while ultimately serving to reduce costs for California businesses and residents. Therefore, we urge ARB to consider the following:

- Extend the Contracting Deadline for Purchase of Biomass-Derived Fuel to January 1, 2013 from January 1, 2012
- Simplify the grandfathering concept for biomass derived fuel that is purchased before the start of the program
- Ensure biogas projects continue to receive offset credits for the destruction of methane
- Remove the requirement that a contract must remain in effect with the same California operator
- Include efficiency increases in the definition for increased capacity
- Remove the requirement in MMR section 95131(i) for mid-year or intermediate verifications for biomass derived fuels if there are volume increases or upstream title changes

These changes will ensure the development of new biomethane projects while maintaining the environmental integrity of the cap.



Extend the Contracting Deadline for Purchase of Biomass-Derived Fuel to January 1, 2013 from January 1, 2012

In § 95852.1.1(a)(1), the required contracting date for the purchase of biomass-derived fuel within California was extended to January 1, 2012. This change acknowledged that facilities which were undergoing contract negotiations and awaiting approval from California regulatory bodies such as CPUC would benefit from the additional time to complete these processes. Subsequent to this extension, a major legislative change has since taken place which has further lengthened the negotiation and approval processes for contracts which were expected to conclude earlier.

In particular, the California legislature passed SB X 12 in mid-2011, creating three tiers of California eligible renewable energy, and requiring new CPUC dockets and CEC guidance on the treatment of renewable energy (including biomethane). The end result is that contract negotiations which began in 2010 or even earlier have been stymied by the uncertainty associated with the passage of this bill.

Thus, we propose the extension of the January 1, 2012 deadline to coincide with the start of the compliance portion of the cap and trade program, and to give entities the opportunity to complete the lengthy regulatory approval processes that contracts in California must go through. Extending the contracting deadline to January 1, 2013 allows the impacts of SB X 12 to be incorporated into the contracting process by biomethane buyers and fuel providers. The extension also ensures that existing projects, which are already subsisting on thin profit margins, are not penalized for circumstances beyond their control. The extension further coincides with the start of the compliance portion of the cap and trade program (2013), which ARB itself proposed because a number of key issues associated with the construction of the cap and trade program, were pending.

Simplify the grandfathering concept for biomass derived fuel that is purchased before the start of the program

EM appreciates that ARB intends for a biomass derived fuel that is eligible for the compliance exemption under § 95852.1.1 to remain eligible for the compliance exemption in future years of the program. Indeed, we appreciate that ARB has not restricted the compliance exemption to "long term" contracts and will allow any contract which meets the January 1, 2012 contract date (which we believe should be extended to January 1, 2013) to be eligible as a biomass derived fuel.

We urge ARB, however, to clarify the language that attempts to codify this grandfathering provision. In particular, §95852.1.1 (a)(1) states:

The contract for purchasing any biomass derived fuel must be in effect prior to January 1, 2012 and remain in effect or have been renegotiated with the same California operator within one year of contract expiration.

The phrase starting with "and remain in effect or have been renegotiated with the same California operator within one year of contract expiration" is not necessary for the codification of this concept, and in fact could create added uncertainty in the market. We propose the deletion of this phrase. This deletion is consistent with §95852.1.1 (a)(3), which states:



The fuel being provided under a contract dated after January 1, 2012 is for a fuel that was previously eligible under sections 95852.1.1(a)(1) or (2), and the verifier is able to track the fuel to the previously eligible contract;

If a contract expires, the language in §95852.1.1 (a)(3) already requires that the verifier be able to ensure the fuel's eligibility under a contract that was in effect beforehand. In addition, further language in §95852.1.1(a)(1)(A) requires that physical transfer of the fuel must begin within 90 days after a signed contract, or if physical transfer of the fuel begins after 90 days, then the first date of physical fuel transfer is considered the contract signing date. In other words, the language in the other conditions already conveys that if a contract is in effect by January 1, 2012, the biomass derived fuel will be considered eligible, and if the contract is renegotiated, the verifier must be able to trace the quantity of eligible biomass derived fuel to the original contract in order for the compliance exemption to be retained.

Contract renegotiations and approvals can be lengthy processes in California, and could take longer than one year, especially if they are contingent on approvals by regulatory bodies such as CPUC. Given this reality, requiring the contract to be "renegotiated within one year of contract expiration" places a significant burden on the fuel provider when the timeline of events may be beyond their control. Removing this language does not impinge on the environmental rigor that California is striving to achieve, since the subsequent language requires that physical fuel be transferred within 90 days and that the verifier be able to track the previously eligible contract. At the same time, it ensures that fuel providers have the flexibility to renegotiate their contract without being subject to a one year time limit when this might be unrealistic given the levels of regulatory approvals that must be obtained in California. Therefore, EM urges ARB to remove the phrase "and remain in effect or have been renegotiated with the same California operator within one year of contract expiration."

In addition, EM urges ARB to modify 95852.1.1 (a)(4) to further simplify the "once in, always in" concept. This section states: Once a certification program is in place, a fuel which meets the requirements of sections 95852.1.1(a)(1) and 95852.1.1(a)(2) will always be considered to have met the requirements in section 95852.1.1(a)(2)

The phrase "once a certification program is in place" should be deleted, since ARB requires annual verification of the biomass derived fuels prior to the implementation of a certification program. Moreover, it is not clear when a certification program will be in place and this phrase could be read in such a way that a biomass derived fuel is not "always considered to have met the requirements in section 95852.1" until the certification program is in place. We believe ARB's intent is for any biomass derived fuel which is adequately verified to continue to remain eligible for the compliance exemption, and since ARB has put rigorous verification requirements in place to do so, and will further be developing a certification program for biomass derived fuels, this phrase seems unnecessary.



Ensure biogas projects continue to receive offset credits for the destruction of methane

§95852.1.1(b), which restricts biogas projects from receiving carbon credits, offsets or allowances "attributed to the fuel production that would otherwise result in holding a compliance obligation for combustion CO2", seems overly broad and counter to what ARB had indicated in the past with respect to offsets from biogas projects.

First, it is not clear whether biogas projects are prohibited from claiming ARB-issued offsets or offsets from other programs (such as CAR). If it is the former, then ARB has already determined which projects are eligible to earn offsets through its protocols, and any adjustments with respect to offset project boundaries and which credits can be claimed should be made in the protocols themselves. If it is the latter, it is not clear what authority ARB has to restrict offsets that are issued by non-ARB programs.

In any case, the combustion of biogas releases biogenic emissions, which should be treated as carbon neutral. If an offset protocol awards credits for avoided methane emissions, that is a separate "reduction" from the value associated with combusting a biogenic fuel, and awarding this credit does not result in "double counting" downstream carbon benefits. If ARB seeksto restrict offsets from the combustion of the biogenic fuel (but not from avoided methane emissions), it would be much clearer if this adjustment were made in the Livestock Offset Protocol or other future methane destruction credit protocols developed by ARB.

We urge ARB to clarify (as it has for Renewable Energy Credits) that generation or use of generation or use or transfer of offset credits from methane destruction projects under the Livestock Offset Protocol—and any future protocols that provide for credit methane destruction, or any other recognized protocols for methane destruction, will not prevent biomass-derived fuels from being exempt from compliance obligations.

For these reasons, we recommend the following revisions to this provision:

An entity may not sell, trade, give away, claim or otherwise dispose of any of the carbon credits, carbon benefits, carbon emission reductions, carbon offsets or allowances, howsoever entitled, attributed to the fuel production that would otherwise result in holding a compliance obligation for combustion CO₂. Generation <u>or use or transfer</u> of Renewable Energy Credits <u>or of carbon offset credits that are available for methane destruction is are</u> allowable and will not prevent a biomass-derived fuel that meets the requirements in this section from being exempt from a compliance obligation.

Remove the Requirement that a Contract Must Remain in Effect with the Same California Operator.

If ARB determines that the phrase "and remain in effect or have been renegotiated with the same California operator within one year of contract expiration" must remain in the language, we believes this requirement for the contract to be renegotiated with the *same* California operator to be unnecessarily cumbersome.



If ARB is concerned that requiring the renegotiated contract with the *same* operator will prevent placeholder contracts from being put into place and inhibit a subsequent informal market in trading "shell" contracts, ARB has already put mechanisms in place that would discourage such practices. First, physical transfer of the fuel must take place within 90 days of the contract being signed. Second, ARB under its mandatory reporting requirements already requires that they be informed of all upstream title holders of the fuel. In addition, most renewable contracts already go through an approval process with CPUC, and eligible renewable facilities must register with CEC (which requires that the fuel provider / marketer, the fuel production site and the downstream combusting entity be identified).

These additional checks (in addition to ARB's own reporting requirements) serve to discourage placeholder contracts and subsequent "shell" contract trading. Indeed, existing solar, wind, and other renewable projects are not restricted to renegotiating with the same counterparty in order to be considered a fuel eligible for the compliance exemption. Since ARB has recognized that biomass derived fuels which can be verified as such have biogenic emissions in nature, treatment of this resource should be at parity with other renewable resources.

From the perspective of preventing leakage and upholding the integrity of the cap and trade program, it is immaterial whether the contract is being renegotiated with the same (original) counterparty or with another California entity. From a biomass derived fuel provider's perspective, being tied to the same counterparty gives the buyer an unfair market advantage and limits the formation of a robust market for biomass derived fuels. Indeed, allowing market participants the flexibility to contract for fuel with various end users based on their unique requirements is crucial for the development of a biomass derived fuels, and ultimately to the benefit of compliance entities and California residents. Removing the restriction that the contract must be renegotiated with the same operator has no impact on the environmental integrity of the cap and trade program and at the same time supports a market for biomass derived fuels. We therefore recommend changing "with the same California operator" and to "with a California operator."

Include efficiency increases in the definition for increased capacity

We supports ARB's added language in § 95852.1.1(a)(2), which clarifies that an increase in fuel production includes "any amount over the average of the last three calendar years of production." We believe ARB should consider adding efficiency increases and the conversion of biogas to beneficial uses to the definition of increased capacity. If a methane capture facility installs a higher efficiency generator and thereby produces more carbon neutral electricity, overall emissions will be reduced. In addition, if a facility invests in converting a flare to a generator or undertakes other equipment modification, overall emissions similarly decline. Therefore, both these instances should meet the "increased capacity" standard and fall under the compliance exemption. Accordingly, we recommend modifying § 95852.1.1(a)(2) as follows:

(2) The fuel being provided under a contract dated after January 1, 2012 must only be for an amount of fuel that is associated with an increase in the biomass-derived fuel producer's capacity, new production or recovery of the fuel that was previously destroyed without producing useful energy transfer. Increased capacity is considered any amount (i) over the average of the last three calendar years production or (ii) associated with an increase in the efficiency of the facility.



including an increase as a result of equipment upgrades, modification or refurbishment.

Remove the requirement in the MMR section 95131(i) for mid-year or intermediate verifications for biomass derived fuels

Section 95131(i) states that in addition to an annual verification for biomass derived fuels, a full verification is required if there has been a change in the entity immediately upstream in the chain of title or there has been an increase of more than 25% in the volume of fuel from an entity immediately upstream in the chain of title. An annual verification already requires biomass derived fuel providers to track and provide data on volumes and all entities involved in the production and transfer of fuel.

Changes in title and volume fluctuations can take place with relative frequency; more importantly, these occurrences might not take place in a predictable manner as the market for biomass derived fuels develops. A full-scale verification each time could be overly burdensome and expensive for small fuel providers when an annual verification itself could take several months to complete. By requiring an annual audit of all relevant sources of supply, title holders, etc. ARB will receive the information it is seeking without adding an additional burden on fuel providers. We urge ARB to consider requiring annual verifications only.

In sum, EM very much appreciates the consideration ARB has given to biomethane projects in recognizing their contribution as a key compliance tool and a source of renewable electricity, heat and transportation fuel. We urge ARB to consider the recommendations that will simplify and clarify the treatment of biomethane while ensuring continued environmental rigor in the state. We look forward to working with ARB and support the development of a robust cap and trade program which will help California achieve its AB32 goals.

Sincerely,

Randall Lack, Chief Marketing Officer