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The Honorable Linda Adams
Secretary for Environmental Protection
California Environmental Protection Agency
1001 I Street
Sacramento, CA 95812

RE: Evolution Markets Comments to the Air Resources Board Preliminary Draft Regulation (PDR)

January 11, 2010

Dear Secretary Adams:

Evolution Markets commends the Air Resources Board (ARB) on its continued progress toward the implementation of AB 32, and we welcome the opportunity to provide comments on the Preliminary Draft Regulation (PDR) for a California Cap-and-Trade Program.

Evolution Markets is a leading financial services firm providing professional brokerage, structured transaction, and merchant banking services to participants in the global environmental markets. Our Carbon Markets Brokerage Group is among the industry's largest, and through our offices in San Francisco, New York, London, Beijing, and New Delhi, we have been active in facilitating many of the global carbon market's pioneering transactions.

Principals at Evolution Markets have participated in market design with various international, regional and state authorities as many of the global carbon markets underwent their formative stages. Evolution Markets' principles also have more than ten years experience facilitating emissions reduction credit (ERC) transactions in California's various air districts, as well as trades under the South Coast's RECLAIM program. As such, Evolution Markets has been a consistent advocate for market-based approaches to reducing emissions. Our belief is that so-called cap-and-trade programs can be an effective tool for achieving environmental goals at the lowest possible cost.

While we believe California consumers can see similar cost-containment benefits from the carbon trading program outlined in the ARB's PDR, the market must be designed in such a manner that empowers the resulting carbon market to achieve these ends. This is the focus of Evolution Markets comments on the PDR, and below we offer suggestions for market design that will lead to a transparent, efficient, and cost-effective program for the implementation of the ambitious greenhouse gas emission reduction goals of AB 32.

As you continue to promulgate the rules for such a program, Evolution Markets offers the following recommendations:



Offset Program

Offset Types

Carbon offsets from non-capped sectors in California's cap and trade program will be an essential cost containment mechanism available to covered entities. They provide low-cost emission reductions, particularly early in the program when marginal abatement costs will be high. Evolution Markets defends and advocates for well-functioning markets. We believe that so long as the quality and integrity of the offset is ensured through the application of stringent criteria, all offset project types meeting the ARB's regulations and criteria from the uncapped sector should be included in the program. Evolution Markets cautions the ARB against accepting or rejecting certain project types based on factors other than their ability to deliver real, verifiable and additional emission reductions.

The example most aptly used in this case is an offset from a landfill gas project. Programs such as the Climate Action Reserve (CAR) have developed stringent methodologies for the quantification of offsets from methane reduction projects at landfills. In addition, they have developed tests such as a Performance Standard and a Legal Test to ensure that each landfill project receiving offsets are real, additional, quantifiable, permanent, verifiable and enforceable – the offset requirements outlined in the PDR. In order to achieve the objective of cost containment early in the program, Evolution Markets recommends the ARB not distinguish between offset project types, but rather simply apply the aforementioned requirements outlined in the PDR for offsets.

In addition, to ensure an adequate supply of offsets are available at the outset of the program and ensure sufficient market liquidity, Evolution Markets believes the ARB should provide in early 2010 a Policy Statement communicating the ARB's intent to allow any offset project type from an uncapped sector so long as it meets the Board's stated offset requirements. Furthermore, to ensure pre-compliance investment in offset projects and other early action, the ARB should release a "minimum compliance offset list" of project types for which robust methodologies already exist, i.e. livestock methane, forestry, landfill gas, etc., and for which the ARB will accept for compliance purposes.

External Programs

Evolution Markets fully supports the ARB approving external GHG crediting offset programs for compliance offset purposes. However, the ARB does not go far enough in the PDR in establishing a level of confidence in which programs will be suitable.

The development cycle of offset projects can take several years, as project developers secure financing, contracts and other essential elements even before implementation or construction can begin. Arguably, the largest risk factor for the investor in an offset project is whether the offsets will be compliance-grade, which in turn is directly related to long-term financing. Often, developers can not secure debt financing without having an off-take contract in hand for the carbon offset credits, reflecting the reality that investors are not willing to engage in long-term offsets purchases without some level of certainty the credits will be useable in a cap-and-trade program.



Evolution Markets recommends that in early 2010 the ARB pre-approve external programs, such as the Climate Action Reserve, that will issue compliance-grade offset credits. This will signal the much needed confidence market participants require to put capital to work in offset projects. The result will be increased availability of supply and liquidity in the California offsets market at the outset of the program in 2012.

Quantitative Limit

Imposing a quantitative limit on offsets as stringent as 3.9% of a covered entities compliance obligation will undermine AB 32's stated objective of achieving a transition to a low-carbon economy at a reasonable cost. The ability of offsets to contain costs is well documented. For instance, economic analysis by the U.S. Environmental Protection Agency (EPA) asserts that the cost of compliance under proposed Federal climate change programs could be more than two-and a half times greater than with an unrestricted use of offsets. (*Source: Analysis of the Climate Stewardship and Innovation Act of 2007 (July 16, 2007), U.S. EPA.*)

Evolution Markets recommends that the ARB remove the quantitative limit on offsets under AB 32 and rather simply ensure all offsets meet the stringent requirements of the PDR. In doing so, the ARB can ease the economic burden of the program and also ensure its environmental integrity.

At a time when the State is experiencing unprecedented economic difficulty, it is crucial to ensure a cap-and-trade program does not adversely impact Californians. The economic and political ramifications from an ill-designed program could overburden California rendering the program a failure. It is important the ARB balance the need to transition to a low-carbon economy whilst not disadvantaging California businesses and or doing economic harm to residents. Removing the quantitative limit on offsets will help California achieve this goal.

Market Design and Oversight

Cost Containment

The ARB has put forth for discussion concepts on cost containment mechanisms. Cost containment should be an objective of market design by the ARB. Evolution Markets believes that there are inherent structures in cap-and-trade programs that allow for the containment of costs, while still ensuring the program meets stated environmental objectives. The three main elements that should be considered for cost containment are:

- **Banking and Borrowing:** Allowing compliance entities to bank allowances or offsets across compliance years is an essential cost containment mechanism. This banking should be without restriction, providing compliance entities the flexibility to manage their emissions in the most cost-effective manner and conduct long-term emissions abatement planning. In addition, providing compliance entities the flexibility to borrow allowances from future year allocations can also assist in containing costs. In order to ensure trading liquidity of future year allowances, which is essential for risk management, borrowing should be limited to within compliance cycles. It is important to note that permitting borrowing beyond the current

compliance cycle could lead to supply shortages in out years, and may also delay critical investments that may have provided long-term environmental benefits.

- **Offsets:** As stated above, carbon offsets can be very effective in cost containment. Again, we encourage the ARB to consider removing the quantitative limit on the use of offsets and eliminate any potential geographic restrictions on offset projects. As there is a direct correlation between the volume of offsets used for compliance and the reduction in costs for compliance under a cap-and-trade program, it would be most beneficial to California businesses and consumers to make the offsets program as broad as possible while still ensuring environmental integrity.

Linkage: California can lower the overall costs of compliance under AB 32 by linking their cap-and-trade program to other programs of similar scope. The basic principle of flexible market mechanisms to reduce greenhouse gas emissions is that the broader the base of the market, the greater the opportunity to lower the overall cost of abatement. It is important to note that carbon is a global issue, and reductions in carbon emissions outside of California benefit the State's citizens to the same degree as in-state reductions. The ARB should consider linking its carbon trading market to other markets on a regional or international basis in order to achieve a marketplace of appropriate scale to assist in containing costs.

The ARB is broadly considering each of the above cost containment mechanisms in some form. In fact, the ARB is considering borrowing and expansion of the offsets program as potential options for its "soft collar" approach. The PDR indicates a preference for cost containment mechanisms under the "soft collar" approach that will be used to adjust the supply of compliance instruments once price triggers are reached.

Evolution Markets advocates for implementing the above cost-containment mechanisms – and those proposed by the ARB – at the onset of the program. Delaying their implementation until a price trigger event, in fact, may impair their effectiveness.

For example, there is a considerable lag in availability of offset supply as capital is held back from the market until there is a clear signal on which offsets will be compliance-grade. In addition, markets operate most effectively when there is certainty, and the potential for increased supply by regulatory fiat is a disruptive market dynamic as the timing for such an event is unknown to the market. The result could very well be a reluctance to engage in long-term capital investment and difficulty in obtaining financing for emissions reductions or efficiency technologies due to the uncertainty of the market an inability to properly hedge those investments.

In order to ensure the above cost containment measures effectively meet their objective in the near-term, Evolution Markets recommends implementing them as part of the basic market design for the program.

Holding Limit

The ARB proposes establishing a limit on the amount of compliance instruments that may be held by any single or affiliated group of entities. In our experience such “holding limits” are difficult to effectively enforce and can actually impede the proper functioning of a cap-and-trade program, particularly in the early years of the program.

One can assume that ARB is considering these provisions as a means to prevent unacceptable market power by any single market participant. However, it would be very difficult for the ARB to determine the most appropriate level of holdings that demonstrate undue market power. In the early years of the program when a limited amount of parties are participating in trading activities, arbitrary limits could be unintentionally breached as early actors acquire allowances or invest in carbon offset projects.

In any case, commodity markets already have in place mechanisms for controlling positions and preventing market manipulation. Clearinghouses, in consultation with the Commodities Future Trading Commission (the CFTC), set position or “holding” limits for commodities traded on futures exchanges. Certainly, clearinghouses can be required to also consult with California regulators on these limits, but setting position limits on a state level would be unprecedented and inefficient. Clearinghouses need the flexibility to adjust position limits as the liquidity of the market fluctuates. Accordingly, Evolution Markets recommends relying on the expertise of the relevant clearinghouse, in conjunction with proper regulator collaboration, to set appropriate holding limits.

Similarly, the regulator should be empowered to establish an efficient market data collection program that includes information from both exchanges and over-the-counter (“OTC”) markets. As the ARB correctly points out, the CFTC currently has the authority to collect this market data, and Evolution Markets suggests ARB pursue an information-sharing arrangement directly with the CFTC.

Evolution Markets agrees that the ARB must have comprehensive and timely information on compliance instrument transactions in order to monitor the market. We support the ability of ARB to obtain transaction information from not only secondary and derivative market transactions conducted on exchanges, but also similar information from derivatives transactions conducted in the OTC market.

Use of Selected Trading Facilities

Promoting Trading on Approved Facilities

The PDR also suggests the ARB is considering promoting the trade of California carbon allowances on trading facilities selected by the Executive officer. Evolution Markets cautions the ARB against promoting or otherwise mandating that carbon trading under the AB 32 be conducted on exchanges. In order to effectively manage compliance risk at the lowest possible cost, invest in carbon offsets, and obtain access to capital investment for emissions reduction activities, market participants must have access to the full range of market-based risk management tools. This includes the OTC market.



The OTC market provides specialized trading services, which can be customized to the individual needs of the market participant. For example, the financing of offset projects using the trading market is an important function of the program envisioned in California. The trading of primary carbon offset credits, that is from the project owner to the first buyer, can only be transacted OTC. Seldom are the commercial terms of any two primary offset transactions alike and virtually all such transactions are for “non-firm delivery” – meaning there is not a guaranteed volume. It is therefore not possible to list such non-standard transactions on an exchange or execute traditional clearing. In addition, the massive capital investment necessary to finance the transition in California to a low-carbon economy will require long-term hedging transactions. Here, too, the OTC market is necessary. It is nearly impossible to effectively execute long-term (ten-plus years) hedging transactions on an exchange, due to the lack of liquidity in future years.

These are just two examples of the essential role OTC markets play in meeting the compliance needs of market participants. Evolution Markets also recognizes the important role exchanges and clearinghouses play in mitigating risk and providing financial assurance for carbon trading. Evolution Markets experience in other emerging environmental commodity markets is that as they mature, there is an eventual commoditization of transactions and a migration of liquidity to exchanges and exchange-cleared products. The ARB should take into consideration this traditional progression, and allow the market to conduct this evolution in its natural course.

ARB Transaction Review Authority

Evolution Markets is concerned with consideration in the PDR of a process requiring trading facilities report all transactions to the ARB and that require the Executive Officer review each transaction for regulatory compliance before approving for transfer.

Evolution Markets strongly believes that this transaction review by the ARB before transfer of credits between counterparties will add a layer of regulatory uncertainty to carbon allowance and credit transactions in California that will, in fact, eliminate the transparency, efficiency, and financial assurance afforded by exchange-traded or cleared-OTC transactions.

In addition, the proposed transaction review process will introduce unnecessary delays to the trading program, reducing its efficiency and increasing transaction costs. For instance, several of California’s air districts require a review of each ERC transaction within their jurisdiction. Similar review is conducted by the South Coast Air Quality Management District for trades of allowances under the RECLAIM program. In these programs, there are delays in processing transactions that can reach 180 days, and the local programs are processing a volume of transactions that are a mere fraction of the volume anticipated in a state-wide carbon program.

Although Evolution Markets has expressed its opinion earlier in this letter that the ARB should not mandate trading of California carbon instruments be conducted on exchange, the review process is, in fact, more problematic for exchange-trading or cleared transactions than for the bilateral OTC market. The regulatory uncertainty inherent in the ARB’s proposed transaction review and approval process introduces a layer of transactional risk that would difficult, if not impossible, for clearing facilities to



manage at an affordable cost. In addition, it will introduce further unnecessary risk to the trading of compliance instruments which will impede trading liquidity in the market.

Evolution Markets' experience in environmental commodity markets suggests that there is a direct correlation between the efficiency of the trading program and the ability for the market to control costs and, ultimately, meet stated environmental objectives. Evolution Markets therefore recommends that the ARB not institute a regulatory review and approval process for transfer. We believe the regulatory oversight function of the ARB can be effectively and efficiency dispatched by instituting a simple robust registry system for both allowances and offsets. Based on its rules, the ARB can qualify registration account holders, ensure the integrity of carbon instruments listed there, and provide a venue for their transfer between counterparties.

Similar registries are in place for the U.S. SO₂ and NO_x allowance trading programs and have been implemented without incident by the U.S. EPA for nearly 15 years. The European Union's carbon emissions trading scheme has a similar system of national registries that has proven cost-effective and transparent. It should be noted that in neither example do the designated regulatory bodies play any role in approving trades before the transfer of compliance instruments.

Use of Selected Clearing Facilities for Bilateral Trades of Offset Credits

As previously discussed, financing offset projects using the carbon trading market presents unique challenges to moving these transactions onto financial clearinghouses and exchanges. These transactions are rarely, if ever, standard. They are almost always for non-firm delivery of credits. In addition, the counterparties involved, especially on the offset creation side, are typically small- and medium-sized businesses. They are farmers, small landfill operators, foresters, ranchers, or specialized offset project developers. These types of companies are not typically well capitalized, and therefore unlikely to use clearing services. Understandably, creditworthiness is a global concern made even more acute by the deep economic recession.

Conducting trades using a clearinghouse requires the seller to post initial margin to cover the potential for failure to deliver. In addition, as the price of carbon fluctuates over the life of the cleared contract, the seller could potentially have to put up additional variation margin. The greater the risk and the less liquidity in a contract the greater the initial margin and more aggressive variation margin required by the clearinghouse. Therefore, mandating offset credit transactions to be conducted through commercial clearing arrangements, as proposed in the PDR, could make carbon offset transactions significantly more expensive and negate much of their cost control impact. It would also likely keep potential offset project developers out of the market, limiting offset supply and, again, increasing the costs of the program.

Once again, Evolution Markets appreciates the opportunity to comment on the PDR. We appreciate your consideration of these comments. We are pleased to make our carbon market professionals available to you and the ARB staff should there be a need to clarify the issues raised above. To that end, I encourage you to contact me or my San Francisco-based colleague John Battaglia, who leads our efforts in



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Sincerely,

(signed)

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