



October 19, 2009

New York State Energy Research and Development Authority
c/o SEP Comments
17 Columbia Circle
Albany, NY 12203-6399

Submitted via electronic mail to: SEPComments@nyserda.org

RE: New Fuels Alliance Comments Regarding Draft (August 2009) New York State Energy Plan

Dear New York State Energy Planning Board Members,

The New Fuels Alliance (NFA) appreciates the opportunity to provide written comments to the New York State Energy Research and Development Authority (NYSERDA) regarding the August 2009 Draft New York State Energy Plan (NYSEP).

NFA is a not-for-profit organization that educates political leaders, regulators, public interest groups, businesses, and the general public about the environmental, economic, and other benefits of non-petroleum fuel production and use. Its organizational purpose is to bring together the wide range of groups and sectors that are stakeholders in the development of advanced, non-petroleum fuels to build a broad and diverse base of support for a more sustainable energy future in the United States. NFA works closely with leading researchers and developers of advanced biofuels to support strategies and policies that will provide meaningful fuel diversification solutions.

A. NFA Supports New York's Goal to Reduce Greenhouse Gas Emissions and Stimulate a Clean Tech Economy

NFA strongly supports the goals outlined in the NYSEP of creating a clean energy economy that stimulates investment, reduces Greenhouse Gas Emissions (GHG), supports in-state clean energy development, and responds to consumer demand. While these goals are ambitious, they are critical to the long-term health of the Empire State's economy, environment, and energy security.

As an organization that works closely with advanced biofuel researchers, producers, investors and other stakeholders, NFA understands the importance of the development and implementation of policies that are designed to spur clean fuel innovations. The advanced biofuel sector is positioned to reduce petroleum dependence, provide carbon reductions in transportation and heating fuel, and stimulate economic development across the state. NFA applauds the NYSEP for recognizing that:

Biofuels derived from cellulose or waste can be cost effective, produce significant emissions benefits, and offset some of the State's petroleum consumption.¹

Biofuels may also play a more significant role in rural communities, and by creating distribution systems for local use of fuels, farms may play a key role in growing suitable energy crops, aid in the conversion of such crops into usable fuels, and then have local communities and on-farm use of such fuels serve as primary markets.²

The clean tech sector requires carbon-based fuel policies and regulations that are durable enough to support long-term investments. To this end, NFA strongly believes that the NYSEP, if drafted and implemented with a balanced approach, holds great potential to further reduce petroleum demand and mitigate climate change, while helping to build a critical piece of the clean tech industry.

B. Draft NYSEP Contains Language that Could Lead to Asymmetrical Carbon Accounting

NFA is concerned that certain language outlined in the NYSEP related to the impacts of biofuel production and use appears to be based on unsubstantiated media reports and does not consider scientific research and opinion on the matter (see comments below). For example, the draft uses an outdated and widely refuted criticism of biofuel:

...some forms of ethanol require more energy inputs (farming, transport of feedstock, refining, etc.) than the resulting energy output from the fuel.³

While this argument has been recycled by a vocal minority, it has been routinely invalidated by numerous respected university and government researchers.⁴ Importantly, NFA believes that while the long-term growth in the biofuel sector will largely be represented by advanced biofuels, it is counterproductive from an investment and business operational perspective to include statements like above in state policy reports as it serves no appreciable benefit and demonstrates a lack of scientific understanding.

Similarly, the notion that biofuels have negative indirect effects has been widely reported in press accounts over the past 12-18 months. Yet this criticism has failed to garner the support of the overwhelming majority of those involved in actually researching this subject. Certainly all fuels could be characterized as having both direct and indirect GHG effects. While NFA agrees

¹ http://www.nysenergyplan.com/Issue_Briefs/Transportation%20-%20IB.pdf Transportation Issue Brief, page 34

² <http://www.nysenergyplan.com/DRAFT%20Energy%20Plan%20FINAL.pdf> SEP Draft, page 39

³ <http://www.nysenergyplan.com/DRAFT%20Energy%20Plan%20FINAL.pdf> SEP Draft, page 38

⁴ <http://www.transportation.anl.gov/pdfs/AF/265.pdf> Wang, et al, 2002;

<http://www.newrules.org/sites/newrules.org/files/images/netenergyresponse.pdf> Morris, 2005;

http://www.iop.org/EJ/article/1748-9326/2/2/024001/erl7_2_024001.html#erl245942s5.1 Argonne National Lab, 2007

that lifecycle assessments (LCA) must be conducted for biofuels (and all renewables), we are concerned that there is no apparent mention in the draft report of requiring the same LCA for petroleum (or fossil fuels). The draft NYSEP states:

It is important that a full life cycle analysis be undertaken to determine what type of biofuels may prove to be a viable alternative to petroleum. Certain biofuels may have a negative effect on some segments of the economy and questionable environmental benefit.⁵

NFA has actively participated in the rulemaking for the California Air Resources Board (CARB) Low Carbon Fuel Standard (LCFS), the U.S. Environmental Protection Agency (EPA) Renewable Fuel Standard II Program (RFS II), and the Northeast/Mid-Atlantic LCFS. While these policies differ in certain legal and regulatory aspects, they have all demonstrated a propensity to develop asymmetrical and/or overly uncertain carbon accounting methods and inconsistent LCA system boundaries. As you can imagine, this is particularly troubling for the advanced biofuel industry, which is penalized for both direct and indirect effects, while its primary competitor, the petroleum baseline, is only debited for direct GHG effects. In the draft NYSEP, four criteria for evaluating alternative fuels are outlined:

...which fuels are (1) most cost effective, (2) able to relieve our dependence on foreign sources, (3) viable for the short and long term, and (4) able to provide improved environmental performance relative to petroleum. Fuels in general, including transportation fuels, should have an acceptable energy content yet be low in carbon.⁶

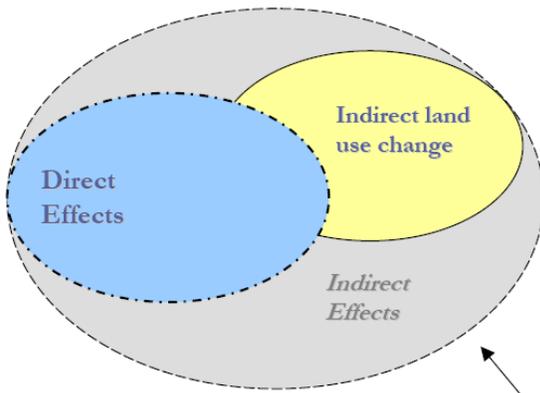
NFA encourages NYSERDA to clearly state that any comparison or analysis of biofuel with petroleum be conducted in a manner that ensures parity of system boundaries. As discussed, the recent trend in rulemaking is to use unbalanced carbon accounting methodologies that do not require petroleum to undergo the same indirect GHG analysis as biofuel. NFA urges New York regulators and policymakers to avoid this type of a regime, and indeed lead an effort to fairly and accurately measure the direct and indirect GHG effects of all fuels, including petroleum and other fossil fuels. If regulators are not able to fully capture the full lifecycle effects of all participating, or baseline fuels, the state should utilize a GHG measurement regime that equally assesses the same type of impacts for all fuels.

NFA presented similar concerns related to biased carbon accounting at an EPA RFS II workshop in June 2009. The presentation noted that EPA considers only one indirect effect (i.e. indirect land use change, or iLUC) for one fuel (biofuel). In addition, EPA did not consider other indirect effects for biofuels. The result is an asymmetrical comparison between biofuels and petroleum with the fundamental system boundary problems and consideration of only one indirect effect:

⁵ http://www.nysenergyplan.com/Issue_Briefs/Transportation%20-%20IB.pdf Transportation Issue Brief, page 34

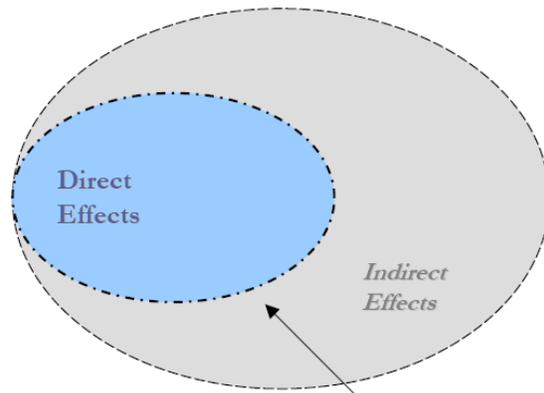
⁶ http://www.nysenergyplan.com/Issue_Briefs/Transportation%20-%20IB.pdf page 32

LCA System Boundary for Biofuels



Biofuels System Boundary

LCA System Boundary for Petroleum



Petroleum System Boundary

C. Advanced Biofuel Companies and Leading Scientists and Stakeholders Support Balanced Approach to GHG Analysis

New York State is host to some of the world’s leading research and development of advanced biofuels. Numerous advanced biofuel companies and clean tech investors are currently doing business in the state, and will play a critical role in helping NYSERDA and others reach the goals outlined in the NYSEP. Accordingly, NFA encourages regulators and policymakers to consider the positions articulated by this emerging industry as it relates to future research and market growth opportunities. More specifically, the advanced biofuel industry has repeatedly stated that the selective enforcement of indirect effects against only biofuels will be detrimental to this emerging industry, which relies on objective policies and level playing fields to survive in a carbon-controlled economy:

...it is essential that **all** regulated fuels are evaluated using the same analytical boundaries...Supporters of enforcing indirect land use effects against biofuel often suggest that this policy decision is necessary to help encourage advanced biofuel production...We have a distinctly different point of view. We are concerned that the inclusion of indirect effects penalties for biofuels...will erode investor confidence and market certainty for both first *and* second-generation biofuels. Contrary to the belief held by some, producers of next generation biofuels such as cellulosic ethanol are *not* supportive of selectively including indirect effects in the LCFS.⁷

Also, leading advanced biofuel investors have spoken in opposition to selective enforcement if indirect affects and asymmetrical carbon accounting:

Some groups have suggested that the current iLUC modeling would help advanced biofuels. This claim is not accurate. Selective indirect effects enforcement against biofuels makes all biofuels, including advanced biofuels, less competitive against the

⁷ See http://www.arb.ca.gov/lists/lcfs09/111-advanced_biofuels_ltr_to_carb_4-15-09.pdf, Letter from 12 Advanced Biofuel Companies to CARB, April 15, 2009

baseline and other alternatives. As investors we are also concerned because selective enforcement adds risk and uncertainty to the advanced biofuels sector by: (a) destabilizing the conventional biofuel sector, which continues to build the infrastructure and support the technological development that is necessary to allow advanced biofuels to reach commercialization; (b) institutionalizing a regulatory bias against all biofuels and sending mixed regulatory signals to the market, which amplifies market risk and will chill investment in advanced biofuels; (c) artificially limiting the type of feedstock available to advanced biofuel producers, which limits the scalability of emerging advanced biofuel companies.⁸

NFA encourages NYSERDA to reconsider the oft-stated theory that the precautionary principle, the implementation of which is designed to protect the environment, requires the immediate declaration that iLUC is a significant effect, and the immediate inclusion of iLUC penalties in the biofuel carbon score. Certainly, some environmental interests are saying this. But New York regulators and policymakers should also consider the following when summarizing the record on the issue of selective enforcement of iLUC:

- Last year, **30 advanced biofuel executives** expressed concerns about the inclusion of indirect impacts for biofuels, especially given the exclusion of these effects for the petroleum baseline or other compliance fuels. The groups stated: “The noticeable lack of indirect effects analysis for other fuels, particularly oil, is of serious concern ...The enforcement of indirect effects of any kind, given the complexity and relative infancy of the field, must be done carefully and in a balanced way.”⁹
- More than **110 scientists, researchers and PhDs** have also spoken on the issue of parity as it relates to measuring the impacts of carbon emissions. These researchers, including several from the National Academy of Sciences, were unanimous in their opposition to selective enforcement of indirect effects against biofuels. In a letter to California Gov. Schwarzenegger, the PhDs cited some of the unintended consequences associated with the selective nature of the CA LCFS: “Adding an iLUC penalty to biofuels will hold the sector accountable to decision-making far outside of its control (i.e. for decisions related to the supply chains of other products), and is unlikely to have any effect on protecting forests or mitigating GHG emissions as a result of land management practices. But because indirect effects are not enforced against any other fuel in the proposed LCFS, an iLUC penalty will chill investment in both conventional and advanced biofuel production...which have the potential to make the agricultural sector far less resource-intensive and could provide a significant carbon negative source of transportation fuel...it is clear that indirect effects should not be enforced against only one fuel pathway.”¹⁰
- The **Truman National Security Project**, in collaboration with dozens of respected U.S. military leaders, noted in a letter to Gov. Schwarzenegger the concern that: “... the indirect land use

⁸ See http://www.arb.ca.gov/lists/lcfs09/308-lcfs_investor_letter_final.pdf, April 21, 2009
http://www.arb.ca.gov/lists/lcfs09/308-lcfs_investor_letter_final.pdf

⁹ Letter from 30 Advanced Biofuel Companies and New Fuels Alliance to CARB, October 23, 2008
http://www.arb.ca.gov/lists/lcfs09/67-nfa_arb_luc_final.pdf

¹⁰ Letter from 111 PhDs to CA Gov. Schwarzenegger, March 2, 2009
http://www.arb.ca.gov/lists/lcfs09/66-28-phd_lcfs_mar09.pdf

change penalty for biofuels will have an adverse effect on our ability to develop alternative fuels. This in turn will prolong the United States' reliance on fossil fuels and deepen the damage caused by both our reliance on oil and by climate change ... No other fuels are penalized for their indirect effects. Singling out one fuel source—in this case biofuels—puts that fuel source at a competitive disadvantage, thereby undercutting investment and the development of new technologies.¹¹

- The **Environmental and Energy Study Institute** questioned the benefit of an unbalanced carbon scoring metric as part of the CA LCFS and raised significant issues with the scientific methodologies in determining the indirect impacts of biofuels: “...work...done to assess the direct life cycle carbon emissions of various fuels, based upon scientifically sound and generally accepted methodologies, is significantly undermined by the inclusion of indirect carbon emissions from land use changes attributed to biofuels production, about which there is very little consensus in the scientific community ... Including indirect emissions from land use change in the LCFS, however, is not likely to promote the stable climate and healthy ecosystems that we all seek. Instead, it will only reduce the political legitimacy of the LCFS as a fair and objective tool for comparing fuel options and unfairly penalize an industry that offers great promise for addressing the nation's climate and energy challenges.”¹²
- The **Oregon Environmental Council** also identified the problem of a policy that has asymmetrical system boundaries, stating “CARB is creating an uneven playing field by choosing to account for the potential indirect carbon effects of biofuels, while not accounting for the potential indirect carbon effects of other fuels ... oil companies are turning to the most polluting, most carbon-intensive means of producing oil – they are disturbing vast tracts of land and harming ecosystems while extracting oil from tar sands. What is the indirect effect of relying on a resource that has peaked? What is the indirect effect of increasing petroleum prices on food prices and the resulting increase of food prices on land use change?”¹³
- The non-profit advocacy group **Sustainable Conservation** echoed the concerns articulated by the 112 PhDs to Gov. Schwarzenegger referenced above, and questioned the scientific validity of assigning indirect land use penalties to biofuels: “promulgating an LCFS with selectively enforced indirect effects is warranted if there is sufficient scientific basis for it. We are concerned that may not be the case currently and this could lead to ... unintended consequences: 1) the potential for increased CO2 as refiners will be compelled to reduce biofuels use and increase petroleum use in the near term ...”¹⁴

Again, we recognize the differences between the LCFS, the RFS II, and the NYSEP, particularly as it relates to setting policy. However, the critiques above speak directly to the issue of parity, consistent LCA system boundaries, and the potential unintended consequences that could result from asymmetrical carbon accounting. Importantly, inconsistent LCA boundaries could

¹¹ Letter from Truman National Security Project and U.S. Military Officials to CA Gov. Schwarzenegger, March 24, 2009 http://www.arb.ca.gov/lists/lcfs09/154-trumannational_security.pdf

¹² Letter from EESI to CARB, March 16, 2009 http://www.arb.ca.gov/lists/lcfs09/65-lcfs_iluc_letter_031609.pdf

¹³ Letter from the Oregon Environmental Council to CARB, April 8, 2009 http://www.arb.ca.gov/lispub/comm/bccomdisp.php?listname=lcfs09&comment_num=58&virt_num=51

¹⁴ Letter from Sustainable Conservation to CARB, March 18, 2009 http://www.arb.ca.gov/lists/lcfs09/12-ashley_boren.pdf

ultimately result in the greater production and use of more carbon intensive fuels and a destabilization of the advanced biofuel industry. In addition to the critiques outlined above, NFA provides a more detailed summary on its website of additional individuals and organizations that have expressed similar concerns.¹⁵

NFA encourages NYSERDA to consider the full breadth of dissent emanating from various disciplines regarding the selectivity of carbon accounting as contained in the CA LCFS and proposed in the RFS II program. NFA further encourages NYSERDA to develop language in the final NYSEP that recognizes the need for a balanced approach to carbon accounting.

D. Conclusion

NFA supports NYSERDA in its efforts to develop a robust clean tech industry, all the while providing GHG reductive energy solutions to New York residents and businesses. To be clear, NFA also supports the concept of holding all fuels accountable for their carbon emissions. Further, NFA is not interested in shielding any fuel from being penalized for lifecycle carbon emissions associated with their production and use. However, the definition of lifecycle must be the same for all fuels, especially if the fuels are compared to one another in a relative case.

NFA urges NYSERDA and state policymakers to consider the information provided and to reflect the views presented above in the final NYSEP. Biofuels represent a unique opportunity to solve environmental, economic and energy security challenges in both the short and long-term. While there continues to be significant discourse that attempts to paint biofuels in a negative light, we are confident that NYSERDA will see through the rhetoric and develop pragmatic and visionary strategies for New York's energy challenges.

The New Fuels Alliance appreciates the opportunity to provide comment to NYSERDA on this important matter. We would be pleased to answer any questions or discuss the issues outlined above in greater detail.

Sincerely,



Andrew Schuyler
Director, Northeast Region
New Fuels Alliance

¹⁵ <http://www.newfuelsalliance.org/LCFS%20Public%20Record%20Summary.pdf>