

SRIA Review

California Energy Commission  
CONSULTANT MEMORANDUM

# Review of Standardized Regulatory Impact Assessments to Date

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## SRIA Review

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### ABBREVIATIONS:

AB32 - California Assembly Bill 32 - the Global Warming Solutions Act  
ARB - California Air Resources Board  
BLS - U.S. Bureau of Labor Statistics  
CAISO - California Independent System Operator  
CalEPA - California Environmental Protection Agency  
CCS - Carbon capture and storage  
CEC - California Energy Commission  
CFL - Compact florescent light  
CGE - Computable General Equilibrium  
CI - Carbon Intensity  
DOF -Department of Finance  
GHG - Greenhouse gases  
GWh - gigawatt hours  
ICT - information and communication technology  
IMPLAN - Impact analysis for PLANning  
JEDI - Jobs and Economic Development Impact  
kWh - kilowatt hours  
LCFS  
LRT - LCFS Reporting Tool -  
<http://www.arb.ca.gov/fuels/lcfs/reportingtool/reportingtool2.htm>  
MMTC02e  
MRO - mattress recycling organization  
MW - Megawatts  
NREL - National Renewable Energy Laboratory  
PGE - Pacific Gas and Electric  
PV - Photovoltaic  
REMI - Regional Economic Modeling, Inc  
RPS - Renewable Portfolio Standard  
ZEV - Zero Emission Vehicle

CONTENTS

<b>1</b>	<b>INTRODUCTION</b>	<b>4</b>
<b>2</b>	<b>ANALYSIS</b>	<b>5</b>
2.1	DEPARTMENT OF FINANCE SRIA REQUIREMENTS	5
2.2	GENERAL OBSERVATIONS	6
2.3	LESSONS LEARNED FOR FUTURE SRIAS	11
2.4	DOF COMMENT SUMMARIES	12
<b>3</b>	<b>OVERVIEW OF SRIA'S TO DATE</b>	<b>17</b>
3.1	ELIGIBILITY AND ENROLLMENT	17
3.2	OIL AND GAS REGULATION	18
3.3	AFFORDABLE SALES PROGRAM	19
3.4	ZEV CREDIT AMENDMENT	22
3.5	NETWORK ADEQUACY	23
3.6	LED EFFICIENCY	26
3.7	MENTAL HEALTH PARITY	28
3.8	AMENDMENTS TO TRUCK AND BUS REGULATION	30
3.9	COMPOSTABLE MATERIALS	32
3.10	CALIFORNIA COMPETES TAX CREDIT PROGRAM	35
3.11	RETURN TO WORK	36
3.12	USED MATTRESS RECYCLING AND RECOVERY	38
3.13	LOW CARBON FUEL STANDARD & ALTERNATIVE DIESEL FUELS	41
3.14	HUNTING: NON-LEAD AMMUNITION	44
3.15	APPLIANCE EFFICIENCY	46

## 1 INTRODUCTION

As of December 1, 2013, Senate Bill 617 (Chapter 496, Statutes of 2011) established additional regulatory impact assessment standards for major regulations. State agencies must conduct a Standardized Regulatory Impact Assessment (SRIA) when it is estimated that a proposed regulation has an economic impact exceeding \$50 million. This report gives a general overview of the SRIAs submitted to the California Department of Finance (DOF) since the inception of the program. As of this publication, a total of 17 SRIAs have been presented to the DOF, covering 15 distinct regulations. In two cases, SRIAs were re-submitted to take account of regulatory amendments. Including the SRIA reports, summaries, DOF responses, and second-order agency responses and revisions, we reviewed a over 50 official documents. In the following section, we offer a synthesis of insights gained from this review, with special reference to DOFs comments and their effect on individual SRIAs.

Our examination of these materials suggests a very effective interagency collaboration to improve stakeholder awareness and strengthen the basis of evidence regarding economic consequences of significant regulatory actions. In this way, the SRIA mechanism can be seen to support more effective policy dialog about the ex ante consequences of important government actions. In its reviews of the SRIA reports, DOF demonstrates a high level of commitment to rigorous and thorough impact evaluation. Their comments reflect careful and objective appraisal of the assessments, with responses that are calibrated to be constructive, lucid, and appropriate to the problem at hand and the resources available to address it.

In addition to providing individual summaries of the SRIA submissions and reviews, our findings suggest ways in which this process might be usefully revised and clarified. Most importantly, we note that the current state of reporting and review open ended, leaving many suggestions for clarification, expansion, and revision without formal responses. In some cases, this means that substantive questions of economic evidence may remain unanswered, which might be a cause for concern to impacted stakeholders ex post. To remedy this, a defined cycle of draft and final SRIA submissions might be desirable, although this means additional costs and possible complication of legislative scheduling.

Another general area where refinement of the SRIA process might be advisable concerns assessment scope and treatment of uncertainty. In some reviews, submitting agencies were encouraged to consider more detailed indirect and induced component effects, particularly with regard to fiscal and interagency effects. While these indications are consistent with the SRIA Checklist and were contextualized on a case by case basis, it would be useful to have more general

guidance about how far and/or to what magnitude assessment narrative is expected to track spillover effects of a given regulation.<sup>1</sup>

In the case of uncertainty, sensitivity analysis can be a valuable tool to qualify estimates and condition stakeholder expectations. It is not a trivial exercise, however, and if it is seen as a necessary ingredient for SRIA reporting, this should be made explicit so appropriate time and resources can be allocated.

## 2 ANALYSIS

Given the generality of the \$50 million threshold and the scope of state agency activities, the SRIA's reviewed here are extremely diverse. The following SRIA "scorecard" gives a chronological summary comparing relevant details of the submissions.<sup>2</sup> A total of 9 agencies have submitted so far, using a variety of assessment techniques.

### 2.1 Department of Finance SRIA Requirements

SB 617 outlines the general requirements for agencies completing SRIAs for proposed major regulations. These include several categories of guidance such as (i) identifying which economic impacts should be quantified and addressed, (ii) requiring that costs and benefits be separately identified for different subgroups, and (iii) instructing how baseline scenarios and regulatory alternatives should be developed and evaluated.

When putting together SRIAs, agencies are required to address a very specific set of economic impacts of the proposed regulation. This includes quantifying several specific variables, including personal income, employment by sector, exports and imports, and gross state product. SRIAs are also expected to address a broader set of economic impacts associated with the proposed regulation, including:

- The creation and elimination of jobs within the state
- The creation and/or elimination of businesses within the state
- Any competitive advantage or disadvantage (due to the regulation) to businesses currently operating within the state
- Expected changes in investment in the state

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<sup>1</sup> This includes impacts on and of the price system, which can be particularly subtle and subject to assumption.

<sup>2</sup> Complete links to all the submissions as provided in Annex Table A1.1 below. For more information, see

[http://www.dof.ca.gov/research/economic\\_research\\_unit/SB617\\_regulation/Major\\_Regulations/](http://www.dof.ca.gov/research/economic_research_unit/SB617_regulation/Major_Regulations/)

## SRIA Review

- Changes in incentives for innovation in products, materials, and processes
- Benefits of the regulation, such as improvements in health, safety, and welfare for California residents.

These requirements are designed to help stakeholders develop a comprehensive understanding of the direct and indirect economic impacts of proposed regulations. This allows the public to understand potential tradeoffs in costs and benefits to California's businesses, workers, and residents. Based on DOF responses to specific agency SRIAs, it is clear that each of these economic impact areas must be thoroughly addressed. In general, the economic impact categories appear to be well met in the SRIAs already submitted to DOF for review. In certain cases, such as the CEC's lighting efficiency SRIA submitted by the CEC, there were omissions that were pointed out by DOF. In that specific case CEC omitted an analysis of the proposed regulation's impact on the creation of new businesses and potential elimination of existing businesses.

While the legislation is clear about what economic costs and benefits should be measured, there is some ambiguity about how much analysis is needed to support a requirement to attribute the costs and benefits to different subgroups, such as agencies, individuals, and businesses. This "threshold" issue is addressed in more detail below.

DOF's guidelines also require agencies to develop a baseline scenario, depicting economic impacts in the absence of the proposed regulation, and two feasible alternatives to the proposed regulation. This implies that each SRIA will include four scenarios (not including any additional sensitivity analyses). One of the two alternatives should include regulatory actions that could provide greater benefits compared to the proposed regulation, perhaps at a higher cost. The other alternative is meant to be a "second best" option in terms of providing inferior benefits to the proposed regulation. To the extent possible, the baseline and alternatives should be analyzed with the same quantitative rigor as the proposed regulation. For example, the DOF's response to ARB's Truck and Bus regulation noted that "ideally, investigation of the alternatives would include the same level of analysis that was applied to the proposed regulation."

Each agency is free to choose any methodological approach that satisfies the economic impact requirements outlined above and DOF appears to be supportive of a variety of modeling approaches.

### 2.2 General Observations

Before looking at individual cases, a few salient characteristics of the SRIA review process should be noted. Above all, DOF responses to the SRIA reports consistently demonstrate a high level of commitment to rigorous and thorough impact evaluation, with diligent attention to data quality and credibility of assumptions, methods, and results communication. In all cases, the comments

## SRIA Review

reflect careful and objective appraisal of the assessments, with responses that are calibrated to be constructive, lucid, and appropriate to the problem at hand and the resources available to address it.

While empirical standards for SRIA review are uniformly high, there is no apparent bias for or against particular assessment methodologies. About two thirds of the SRIA's use the REMI model, but other approaches are accepted as long as they are rigorously implemented. This is consistent with DOF's stated policy, which provided REMI as an endorsed option for assessment, but did not mandate its use. Several of the other approaches appear well-suited to their context, further supporting DOF's policy of an open assessment standard.

On this basis, the SRIA mechanism as it has been implemented thus far appears to meet its stated objectives - informing stakeholders about the detailed economic consequences of significant regulatory actions. Despite remarkable diversity of context, SRIAs support public awareness and more effective policy dialog about the ex ante consequences of important government actions. This is a valuable service to both public and private actors, elucidating potential benefits and opportunities arising from policy, but also identifying adjustment needs and fiscal responsibilities that can be better accommodated and/or mitigated with foresight.

In every case, DOF made constructive suggestions for extension and improvement of reviews, in most cases suggesting revision of the initial submittals. In only two cases, however, have revisions been submitted by the time of this report. In two others, an addendum and written responses were provided. This poses a general question regarding the SRIA review process - should it be open ended or include a requirement to finalize assessments based on DOF feedback? An alternative, draft and final report framework might be complicated by legislative scheduling, but it would provide important closure to stakeholder communication. In its current form, the SRIA process leaves substantive questions of evidence unanswered.

This issue also points to another concern, variability in detailed standards for assessment. Careful examination of the review comments indicates that issues receive different emphasis across the submissions. While some differences are inevitably due to the diverse context of the regulations covered, expectations do not appear uniform regarding scope of assessment. A case in point is fiscal impacts, which in some comments are apparently confined to the line agency and in others the comments recommend including impact across agencies. Of course economic effects are very pervasive, but it might be helpful to explicitly delineate how many tiers (or what magnitude) of linkage need to be explicitly considered when discussing constituent parts of indirect and induced effects. The SRIA documentation, including the Checklist, mandates such considerations, but thresholds could be clarified.

## SRIA Review

Another issue is variation of apparent expectations regarding sensitivity analysis. This is explicitly recommended for in some comments but not others. Sensitivity analysis is a valuable strategy for addressing systemic uncertainties in data and assumptions, but including it is a significant commitment of time and resources for any assessment. If this corresponds to a uniform standard for SRIA's, it would be useful to clarify DOF's expectations.



SRIA Review

Table 2.1: SRIA Scorecard

Date	Agency	Regulation	Method	Concurred	Made Suggestions	Disagreed with Results	Disagreed with Method	Suggested Revision	Suggested Change of Method
1 14-Jan-16	California Health Benefits Exchange	Eligibility and Enrollment	REMI						
2 20-Feb-15	Air Resources Board (ARB)	Oil and Gas Regulation	REMI	✓	✓				
3 27-Mar-15	Department of Transportation	Affordable Sales Program	IMPLAN (RIMS) and TREDIS	✓	✓			✓	
4 22-Jun-15	Air Resources Board	ZEV Credit Amendment	REMI PI+	✓	✓			✓	
5 17-Jul-15	Department of Insurance	Network Adequacy	Own actuarial model of program, plus RIMS assessment	✓	✓			✓	
6 12-Aug-15	California Energy Commission	LED Efficiency	REMI PI+	✓	✓			✓	✓
7 23-Jan-14	Department of Insurance (CDI)	Mental Health Parity	Own actuarial model of program, plus RIMS	✓	✓			✓	✓
8 25-Feb-14	Air Resources Board (ARB)	Amendments to Truck & Bus Regulation	REMI		✓			✓	
9 8-Jul-14	CalRecycle	Compostable Materials,	REMI	✓	✓	✓		✓	

SRIA Review

			Transfer/Processing							
10	11-Aug-14	Governor's Office of Business and Economic Development (GO-Biz)	California Competes Tax Credit( <a href="http://www.business.ca.gov">www.business.ca.gov</a> , .pdf)	IMPLAN	✓	✓				
11	6-Oct-14	Department of Industrial Relations	Return-to-Work	Own methodology, no integrated model	✓	✓			✓	
12	16-Oct-14	CalRecycle	Used Mattress Recovery & Recycling	REMI	✓	✓	✓		✓	✓
13	17-Oct-14	Air Resources Board	Low Carbon Fuel Standard & Alternative Diesel Fuels	REMI PI+	✓	✓			✓	
14	21-Nov-14	Fish and Game Commission	Hunting: Non lead Ammunition	IMPLAN	✓	✓			✓	
15	3-Dec-14	California Energy Commission	Appliance Efficiency	REMI	✓	✓	✓	✓	✓	✓

### 2.3 Lessons Learned for Future SRIAs

In addition to the full SRIA review detailed in Section 3 of this report, we analyzed four SRIAs for insights that could be applied to CEC's upcoming efficiency regulations. These four SRIAs are for:

- CEC's Appliance Efficiency Regulation (12/3/2014)
- ARB's Truck and Bus Regulation Amendments (2/25/2014)
- ARB's Oil and Gas Regulation (4/29/2015)
- CEC's LED Lighting Efficiency Regulation (8/12/2015)

Based on a review of DOF's comments to these four proposed regulations, we have identified several lessons that will help ensure the timely approval of future CEC SRIAs.

**First, the baseline scenario and the two alternatives to the proposed regulation need to be thoughtfully constructed and rigorously analyzed.** In comments to ARB's Oil and Gas Regulation, the purpose of developing and analyzing the two alternatives is to provide readers the information necessary to assess the regulatory tradeoffs *in both directions*. Therefore, the objective in constructing the alternatives should be to develop one that has greater benefits, but at higher costs, and one that has lower benefits, presumably at lower costs.

**Second, sensitivity analysis around key uncertainties is a critical component of the SRIA.** This is perhaps the most important factor to consider for CEC's upcoming SRIAs. While the statutory language for considering uncertainties is somewhat vague, DOF's comments to individual SRIAs makes clear that accounting for uncertainties is a very valuable contribution. Examples of where sensitivity analysis would have improved the two CEC SRIAs and ARB's Oil and Gas SRIA (based on DOF's comments) include:

- CEC Appliance Efficiency Regulation: DOF was critical of CEC's "useful lifetime" assumptions, suggesting that typical usage rates may differ from rates assumed in engineering studies. A sensitivity analysis of different lifetime assumptions representing variation between engineering and typical usage estimates could have addressed this issue.
- CEC Lighting Efficiency Regulation: DOF suggested that CEC consider the impacts that any preemption by federal energy efficiency regulations might have on the state regulation's costs and benefits. This sensitivity analysis could have been implemented by changing the time path of costs and benefits in accordance with an assumed date for adoption of a federal standard.
- ARB Oil and Gas Regulation: DOF specifically recommended a sensitivity analysis addressing variability in emissions rates and existing control devices across the various regulated entities.

For CEC's future SRIAs, we recommend that several areas be considered for sensitivity analysis. For the upcoming computers, monitor, and displays regulation, the key uncertainty for measuring the benefits from energy saving technologies is the future electricity price. Scenarios should be developed for all scenarios (including the baseline) to address the possibility of both higher and lower electricity prices. For the upcoming pool pumps and spa labeling regulation, uncertainty around future water scarcity could affect the assumption market demand and penetration rates for these water-intensive goods. In addition to these regulation-specific uncertainties, it is also recommended that CEC consider the potential impacts of an adverse macroeconomic cycle. This could be done by varying general economic growth assumptions for the state.

**Third, when relevant, the proposed regulation's impacts on state agencies need to be addressed.** Based on DOF's comments on CEC's lighting efficiency standard, it is clear that state agency impacts need to be addressed if the regulation will effect how state agencies procure certain equipment. For the upcoming computers, monitors, and displays regulation, the proposed changes would clearly change the costs and benefits for state agencies, which are large consumers of computer equipment. A simple calculation of costs and savings based on agency computer and monitor procurement should satisfy this SRIA requirement.

**Fourth, due to ambiguities in determining which subgroups require specific attribution of costs and benefits, it is prudent to choose a methodology that can provide high resolution of result decomposition across a variety of subgroups.** In three of the four SRIAs, DOF suggested unique ways to further decompose results across different subgroups. For example, in the ARB Oil and Gas SRIA, DOF suggested exploring the geographical impacts of the regulations on specific refineries. It may also be prudent for future SRIAs to consult with DOF ahead of SRIA submission to receive feedback on what sorts of subgroup analysis may be required.

### 2.4 DOF Comment Summaries

In following sub-sections, we very briefly summarize DOF comments made on each SRIA. These summaries in no way are intended to reflect official policy, but only the sense of constructive feedback offered in response to the assessments.

#### 2.4.1 Eligibility and Enrollment (14-Jan-2016)

DOF is generally supportive of methodology used for the SRIA. They recommend expanding two economic impact sections: the incentives for innovation and the fiscal impacts on state agencies. They also suggested providing more description of the two alternatives so that readers can evaluate tradeoffs in the various regulatory approaches.

#### *2.4.2 Oil and Gas Regulation (29-Apr-2015)*

DOF was generally quite favorable of ARB's Oil and Gas SRIA. They concurred with the methodological approach to estimating both direct and indirect economic impacts. The main critique of the SRIA was that it did not decompose costs (direct, indirect, and induced) across the various refineries. They expressed an interest in spatial incidence and more treatment of heterogeneity.

ARB used the REMI PI+ model to estimate the indirect economic impacts of the regulation. A strength of the SRIA, as noted by ARB, was the clear linkage between the estimated direct costs and benefits and the indirect impacts. Direct costs were attributed to each specific emissions control strategy, which were then aggregated for use as the cost input into the REMI model. DOF did suggest that ARB report the magnitude of the direct costs for each proposed control strategy.

ARB's SRIA also included a detailed analysis of the overall economic impact of two alternative regulatory options, clearly highlighting the tradeoffs and reasons for rejecting each option. DOF did ask that the alternatives also include an estimate of *direct* costs and benefits.

#### *2.4.3 Affordable Sales Program (27-Mar-2015)*

While upholding the qualitative findings, the comments raise many concerns about incompleteness in the analysis. Firstly, scenarios are incomplete and need to be re-specified. Second, the fiscal aspect of the assessment is incomplete, without clear specification of monitoring/supervision costs over the five year time horizon of the program. Finally, there is not adequate treatment of spillovers to the real estate market and allocation of program revenue to state housing programs.

#### *2.4.4 ZEV Credit Amendment (22-JunApr-2015)*

DOF requested a more extensive treatment of credit allocation, market assumptions, and incentive properties. They would also like to see more emphasis on program benefits, including accelerated ZEV adoption/diffusion.

#### *2.4.5 Network Adequacy (7-Jul-2015)*

Although DOF accepted the method, they requested significant improvement/extension in three areas. The method combined multipliers from the RIMS II model with the agency's own actuarial model and expert data. First, assumptions regarding baseline and scenario impacts are not well grounded in existing literature. Second, there is not adequate treatment of heterogeneity in the industry and consequentially distorted patterns of risk bearing and structural vulnerability. Finally, there is not adequate treatment of the agency's own implementation costs, particularly with respect to monitoring and enforcement.

#### *2.4.6 LED Efficiency (12-Aug-2015)*

DOF commented that the discussion supports the general findings, but makes many suggestions for extension. Firstly, DOF wants explicit assessment and narrative regarding industry structure changes (firm entry), without discussing methodology for this (not part of REMI or most impact assessment models). Secondly, they suggest that state office LED compliance was omitted, as was enforcement cost of the overall program. Next, relationships with an expected federal standard needs discussion, and then DOF requests sensitivity analysis for the first time. Finally, there is a suggestion for another assessment (CFLs), which are not the subject of this SRIA.

#### *2.4.7 Mental Health Parity (23-Jan-2015)*

DOF is generally supportive of the qualitative conclusions, but gives extensive suggestions regarding expansion and refining the estimates, including suggestions about methodological choice (multipliers). A revised SRIA under this guidance would be much more detailed, with more fully specified scenarios and more explicit and detailed multiplier estimates.

#### *2.4.8 Amendments to Truck and Bus Regulation (25-Feb-2014)*

DOF is generally supportive of the SRIA, but makes a number of suggestions for extension. First among these is a call for discounting in some reported results, although no general method or assumptions are presented. Secondly, the desire is expressed for more "thorough" assessment of the alternative policies, which were thought to have been given cursory treatment reference to the primary policy scenario. Finally, there is an expressed interest in extensions to more fully evaluate public health effects, recalling that this was a primary benefit of the policy during its legislative run-up.

DOF supported the methodological approach used by ARB to calculate both the direct and indirect economic impacts. The direct costs and savings of the proposed regulation are the changes in capital expenditures necessary to retrofit the truck/bus fleet according to the new phase-in schedule and more flexible compliance options. ARB's SRIA clearly identifies these direct costs and savings. It is worth noting that the baseline scenario includes the current Truck and Bus regulations, so the amendments are appropriately analyzed relative to the existing regulatory environment, not a baseline without the current regulations.

The REMI PI+ model was used to estimate the indirect economic impacts of the proposed regulation. Direct costs/savings, outlined above, were assigned to 5 impacted sectors based on each sector's estimated share of the state-wide fleet. This straightforward linkage between the direct and indirect economic impacts was satisfactory for DOF.

#### *2.4.9 Compostable Materials (8-Jul-2014)*

Department of Finance generally supports the approach, but finds fault with some results and interpretation. The conclusion that higher costs increase employment is attributed to substitution for higher cost investments in capital rather than direct job stimulus. Generally, patterns of job creation need to be better elucidated. Second, there are errors in labeling and/or interpretation of direct, indirect, and induced impacts. Finally, a number of expository/stylistic suggestions are made.

#### *2.4.10 California Competes Tax Credit Program (11-Aug-2014)*

The SRIA received, by far, DOF's most supportive set of comments. No exception taken to any aspect of method, data, assumptions, or results. Just one optional suggestion was made for more detailed sector narrative.

#### *2.4.11 Return to Work (6-Oct-2014)*

DOF was generally supportive, but recommends some extensions. These include more detailed treatment of macro effects like reduced investment because of higher labor costs. They also requested consideration of distributional impacts due to industry and coverage heterogeneity. Finally, more explicit discussion was requested regarding the baseline distribution of benefits across industries and potential for offsetting consumption benefits.

#### *2.4.12 Used Mattress Recycling and Recovery (16-Oct-14)*

The comments on this SRIA suggest revisions that, if taken to heart, would result in a very different assessment, and possibly dramatically different conclusions. A long list of omitted agency, cost, and incentive components suggests that many important indirect and induced effects of the policy have not been considered, and that doing so could lead to a broader and more variegated set of impacts, including substantially different estimates for those impacts already treated. The current version of the report is also faulted for lack of fiscal detail in the Baseline and Policy scenarios, particularly with respect to expected program and implementation costs.

#### *2.4.13 Low Carbon Fuel Standard & Alternative Diesel Fuels (17-Oct-2014)*

In their comments, DOF challenges ARB assumptions about low carbon fuel availability, particularly late in the program. They recommend several improvements, including more consistent units to facilitate comparison, more explicit contextual narrative with respect to cap and trade, and more detailed empirical evidence on the policy alternatives to support stakeholder appraisal of conclusions. DOF also recommends expansion of the analysis in several areas, including more detailed treatment of alternative diesel fuel and more complete accounting for expected implementation and program costs (e.g. inspection, licensing, etc.).

*2.4.14 Hunting: Non-lead Ammunition (27-Nov-14)*

Comments by DOF do not challenge the methodology, but suggest that impacts are being overestimated because IMPLAN is being misapplied. Instead of isolating ammunition as a consumer expenditure, the SRIA assumes an increase in spending on the aggregate category of hunting expenditures. This would probably yield higher multipliers as it comprises extensive service sector linkages, to which DOF takes exception. The comments also reflect concern about potential scarcity of compliant ammunition, leading to price effects not captured in the assumptions and not reflected in fixed-price multiplier estimates.

*2.4.15 Appliance Efficiency (3-Dec-2014)*

DOF gave limited endorsement of the overall results but challenged several dimensions of the approach and methods used. Firstly, they questioned the baseline and recommended that it be re-specified. Second, they challenged the modeling of adjustment and adoption cost incidence, emphasizing this would have important distributional implications. In a similar line of argument, DOF argues that more detailed information and transparent assumptions are needed with respect to end user adoption costs. Fourth, the SRIA is faulted for lack of rigor in the assessment of urinal and faucet technology choice. Finally, DOF believes that treatment of fiscal impacts is incomplete.



## 3 OVERVIEW OF SRIA'S TO DATE

This section provides more complete documentation of the SRIA's that have been produced since these impact assessments were mandated by the state. A total of 18 SRIA submissions have been made for 15 distinct regulations, and we provide a brief overview of the latter group. We have excerpted text from official SRIA submissions and Department of Finance comments. Links to all these original documents can be found in Annex Table A1.1 below.<sup>3</sup>

### 3.1 Eligibility and Enrollment

Agency: California Health Benefits Exchange (14-Jan-2016)

“The regulations provide the public with clear standards and eligibility requirements to qualify for federal tax subsidies through the Exchange. They also set out the standards and requirements for the qualified health plan issuers regarding enrollment of qualified individuals in the qualified health plans and termination of coverage for qualified individuals through the Exchange. In addition, the regulations establish procedures for appeal of eligibility determinations and redeterminations so as to provide the public with an opportunity to request and receive a fair hearing.” (*extracted from* Form DF-131: Standardized Regulatory Impact Assessment Summary, 1/14/2016)

#### 3.1.1 Methodology

REMI PI+

#### 3.1.2 Summary of Results

“Individuals who enroll through the Exchange who previously did not have health insurance will now have better and timelier access to healthcare. In 2014 these individuals paid premiums and incurred additional out-of-pocket healthcare spending, net of federal subsidies, totaling \$750 million and reduced their spending on goods and services not related to health insurance and healthcare by a like amount. In 2014, Exchange enrollees who were previously insured and now receive a federal subsidy spent \$2,753 million less on health insurance and on out-of-pocket expenses, which allowed them to spend more on non-health insurance goods and services.” (*extracted from* Form DF-131: Standardized Regulatory Impact Assessment Summary, 1/14/2016)

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<sup>3</sup> This section contains numerous passages from a variety of official documents, which are quoted directly to avoid any of this information being construed as the opinions of individual authors or agencies. All information provided in this section is conditional upon independent verification and does not represent policy or communication by any official California state agency or individual.

### 3.1.3 Department of Finance Comments

“Finance generally concurs with the methodology used to estimate annual impacts under the proposed regulation. However, there are three areas where the analysis could be improved. First, in the incentives for innovation section, there could be large gains from streamlining medical processes and tracking with the increased access to health care. This section could include an estimate of individuals with increase employment mobility as a result of ease of getting health care coverage through the exchange. Second, the discussion of the impacts of the two alternatives could be expanded with more narrative about how the alternatives would work. The discussion of alternatives is required to help illuminate the tradeoffs made in the proposed regulation, and the public would benefit from additional assistance in understanding the relatively long and complicated regulation. Third, the discussion of the fiscal impact to other state agencies could be expanded to include the impact of the California Department of Social Services as a result of being designated the exchange appeals entity and to the Department of Health Care Services (DHCS), the Office of Systems Integration, and other state entities as a result of changes made to the California Healthcare Enrollment, Eligibility and Retention System. Additional this section should be expanded to include impacts to DHCS and the counties resulting from mixed Advanced Premium Tax Credit and Medi-Cal cases.” (extracted from Department of Finance Comments, 2/16/2016)

## 3.2 Oil and Gas Regulation

Agency: Air Resources Board (29-Apr-2015)

“The goal of the proposed Oil and Gas Regulation is to obtain maximum GHG reductions, primarily methane, from oil and gas production, processing, storage and transmission compressor stations in a technically feasible and cost-effective manner. The proposed Oil and Gas Regulation (O&G Proposal) will promote statewide uniformity in methane emissions controls, minimize the administrative burden on local air districts, harmonize state requirements with current and near-future local and federal requirements, achieve co-benefits that protect public health from toxic emissions from well stimulation or other sector sources, and support the State Implementation Plan (SIP) by designing a regulation that attends to criteria pollutant goals.” (extracted from Form DF-131: Standardized Regulatory Impact Assessment Summary, 4/29/2015)

### 3.2.1 Methodology

REMI PI+

### 3.2.2 Summary of Results

“The O&G Proposal is anticipated to deliver environmental benefits that include an estimated annual reduction in GHG emissions, beginning in 2018, of about

## SRIA Review

556,000 MT CO<sub>2</sub>e from oil and gas related emissions in California. In addition, the O&G Proposal is expected to save about 1.1 million standard cubic foot (Mscf) per year of industrial natural gas through reductions of leaks and vapor recovery systems. Quantifying this benefit, assuming natural gas price is \$4.10 per Mscf, the savings from the reduction in loss of natural gas would equal \$4.8 million a year. The cost-effectiveness of the O&G Proposal is estimated to be approximately \$40 per MT CO<sub>2</sub>e reduced.

The initial direct costs incurred by regulated industries in 2017 is estimated at \$18.8 million (using an annualized capital cost formula), which covers the capital costs required for compliance. Additionally, it is expected that primary industries will incur minimal ongoing costs for labor and capital after the first year of implementation.” (*extracted from Form DF-131: Standardized Regulatory Impact Assessment Summary, 4/29/2015*)

### 3.2.3 Department of Finance Comments

“Finance, in general, concurs with the methodology used to assess the economic impact of the proposed regulation. The SRIA was particularly well constructed in relating the direct impacts of the proposed regulation to the overall impacts. However, it would helpful to include the magnitude of the unit and total costs of devices and the geographical distribution of the affected facilities. Since the majority of retrofit costs are expected to occur in 2018, the highest direct cost and economic impact should occur in 2018, not in 2017 as described in the SRIA. While the SRIA does comply with the requirement to discuss alternatives, it would be helpful to include the direct cost of each alternative in the SRIA, rather than just the overall impacts. Finally, ARB may want to discuss how an individual facility's characteristics, such as emission rates and existing control devices, may affect the calculation of direct costs, and thus economic impacts of the proposed regulations. These existing efforts also determine the amount of emissions reductions that would be achieved.” (*extracted from Department of Finance comments, 5/28/2016*)

### 3.3 Affordable Sales Program

Agency: Department of Transportation (27-Mar-2015)

“Streets and Highways Code Section 118.6 states that Caltrans, to the greatest extent possible, will offer to sell or exchange property that has been determined by Caltrans to be excess to their needs. Government Code Sections 54235 through Section 54238.7 known as the Roberti Act and amended by SB 416 in 2013 which includes priorities for disposal of residential properties originally acquired for the SR 710 extension in the cities of Los Angeles, South Pasadena, and Pasadena and includes requirements that the agency impose terms, conditions, and restrictions to ensure that housing will remain available for low or moderate income households. Together, these codes provide Caltrans with direction to establish a program that includes both excess property sales and

## SRIA Review

an affordable housing program. Adoption of the proposed Affordable Sales Program (ASP) regulations will allow Caltrans to dispose of the surplus parcels of residential real property and endeavor to meet the intended goal of the Legislature of preserving and expanding the availability of low and moderate income housing supply.” (extracted from Form DF-131: Standardized Regulatory Impact Assessment Summary, 3/27/2015)

### 3.3.1 Methodology

IMPLAN (RIMS II) and TREDIS

### 3.3.2 Summary of Results

“Costs -The total costs for the Regulation for the thirty year analysis period is estimated to be \$ 900 million dollars. This includes:

Maintenance services are estimated to cost \$12.6 million.-The property management staff is estimated to cost approximately \$1.9 million in 15/16, reducing to \$375,000 in 20/21. The total cost is approximately \$8 million · To sell the properties, it is estimated at \$1.6 million in 15/16 increasing to \$3.6 million in 16/19. The total cost is estimated to be \$17 million. · The relocation assistance Caltrans pays is estimated to be \$2.5 million. · The 24% the State pays to LA County drops from \$1.3million in 15/16 to \$0 in 20/21. The total cost for the 24% is estimated at \$3.7 million.

Mortgage payments and property taxes for 30 years are estimated to be \$800 million.

The total rent paid by individuals is estimated to be \$15.6 million. · The closing costs paid by buyers is estimated to be \$3700 per property (Zillow), this is approximately \$1.8 million for the analysis period.

Benefits- For the thirty year analysis period, the total statewide benefit is estimated to be \$500 million. Included in this total is

Property Sales paid to the state are estimated to be \$225 million.; · Total rent paid to the CA General Fund is estimated to be \$15.6 million.

Disposable income for individuals is estimated to be \$2 million.;- Relocation assistance to individuals is estimated to be \$2.5 million - Maintenance services paid to the locals and others is \$12.6 million. Salaries paid to property management and sales employees is \$24 million. CalHFA's Affordable Housing Trust Account is estimated to receive \$78 million. The Housing Related Entities are estimated to receive \$20 million and the affordable property owners are expected to receive \$85 million in equity and appreciation.” (extracted from Form DF-131: Standardized Regulatory Impact Assessment Summary, 3/27/2015)

### *3.3.3 Department of Finance Comments*

“Finance generally concurs with the methodology used to estimate the annual impacts under the affordable sales program. However, there are three areas where the analysis is incomplete. First, the SRIA needs to include a discussion of two impacts that are required in California Code of Regulations, Title 1, section 2003 (a)(3)(C) and (E). These are competitive advantage or disadvantage and innovation incentives.

Second, the discussion of the fiscal impacts is incomplete. The proposed regulations state that subsequent sales of affordable properties and housing-related private entities will be monitored. Caltrans proposes that the California Housing Finance Agency administer some of the conditions of the affordable sales program. Therefore, the resource commitment of this agency to the affordable sales program has to be included in the SRIA. This is particularly important given that Caltrans projects it will take five years to sell all the excess properties.

Third, the SRIA must address the impacts of redirecting sales proceeds towards housing entities and the proposed Affordable Housing Trust Account for the purposes of expanding affordable housing in the area. The SRIA does discuss the impacts of additional transportation spending, as directed by the statute, but does not discuss the benefits to low and moderate income households in the region if more affordable housing becomes available as a result of the proposed regulations. These benefits could be substantial, given the estimated proceeds flowing to the Affordable Housing Trust Account are around \$88 million, and the housing-related entities would also receive \$30 million.”  
*(extracted from Department of Finance Comments, 4/13/2015)*

### 3.4 ZEV Credit Amendment

Agency: Air Resources Board (22-Jun-2015)

“The proposed amendment is developed to help meet the goals of the Zero Emission Vehicle (ZEV) Regulation's fast refueling credit provision while preventing excessive credit generation that could lead to substantial reductions in ZEV credit sales. This amendment is required to ensure that only the appropriate amount of fast refueling ZEV credits are issued to encourage innovative strategies on range extension, but not excessive credit generation.” (extracted from Form DF-131: Standardized Regulatory Impact Assessment Summary, 6/22/2015)

#### 3.4.1 Methodology

REMI PI+

#### 3.4.2 Summary of Results

“Benefits: There are no substantial benefits directly introduced to individuals or to California businesses by the proposed amendment.

Costs: The proposed amendment does not impose any direct costs on individuals. However, the amendment imposes costs, in the form of reduced potential revenue, on ZEV manufacturers that will sell MY 2017 automobiles in California with battery exchange capabilities that qualify for ZEV fast refueling credits. These ZEV manufacturers under the proposed amendment could lose an estimated \$252 million in credit revenue. There are also additional indirect costs as a result of the estimated direct costs.” (extracted from Form DF-131: Standardized Regulatory Impact Assessment Summary, 6/22/2015)

#### 3.4.3 Department of Finance Comments

“Under the assumption that manufacturers would generate credits by taking advantage of multiple battery-swap events allowed under current regulations, Finance concurs with the methodology used to assess the economic impact of the proposed amendments. However, the impacts of the amendments are sensitive to the assumption that manufacturers would generate credits from battery swaps on a small subset of ZEVs under the baseline. Assuming there would have been credits generated, there are a number of areas where we would suggest augmenting the analysis of impacts.

While the SRIA discusses the effects of this amendment on revenue from ZEV credits, it could add a discussion of the impacts of fewer credits available on the ZEV credit market and resulting costs or benefits. ZEV credits may be banked indefinitely and this may help manufacturers prepare for ZEV compliance requirements that escalate over the coming decade. A decrease in the supply of credits should increase credit prices, which may increase revenues from remaining credits, or may induce other manufacturers to supply

more ZEVs. The direction of impact depends on how the market for credits functions, so additional background there would be useful, particularly on the distribution of impacts to buyers or sellers of credits. The changes in prices and options available for purchase would then have impacts on individuals, and these should also be discussed.

The impact assessment focused primarily on regulatory costs, but should also include a more substantial discussion of regulatory benefits. For example, the overall decrease in credits could induce faster adoption of ZEVs, and emission reductions would have health benefits. A more complete discussion of benefits would help to illustrate the rationale for the amendment and should help to place it in the framework of existing ZEV regulations, as well as the broader system of regulations supporting reductions in greenhouse gas emissions.” (extracted from Department of Finance Comments, 7/22/2015)

### 3.5 Network Adequacy

Agency: Department of Insurance (7-Jul-2015)

“A robust set of network and reporting requirements are needed to attain, assure, monitor, and enforce adequacy. Revision of the existing network adequacy regulation is needed to provide additional transparency of current information to consumers. This will assure that insureds have the opportunity to access needed health care services in a timely manner and without unacceptable financial burden.” (extracted from Form DF-131: Standardized Regulatory Impact Assessment Summary, 7/17/2015)

#### 3.5.1 Methodology

Own actuarial model, expert consultation, and selected RIMS multiplier results.

#### 3.5.2 Summary of Results

##### COSTS

“In the Department's economic model, the year 2014 represents the baseline. The total cost impact on claims of the proposed regulation is defined as the difference between the total paid for medical services before and after the regulation. The Department started with estimated premium amounts for 2014 of \$3.36 billion for the individual, small group and large group markets that it regulates. The Department then applied the expected loss ratios and expected paid-to-allowed ratios to estimate the allowed cost before regulation. Based on that calculation the baseline for 2014 total paid charges (what the insurers are assumed to pay for covered services) amounts to \$2,792 billion.

The Department then applied new post regulation assumptions (detailed on SRIA pg. 9) and found that the total paid charges would rise to \$2.813 billion. The new set of assumptions included network utilization percentages, the percent of billed charges for current contracts between insurers and providers,

## SRIA Review

and the estimated cost of medical services if performed out-of-network. The new assumptions were applied to the baseline for allowed charges.

### BENEFITS

To estimate the impact of medical bankruptcies in California for 2016, the Department used data from the US bankruptcy courts which indicated that there were approximately 136,500 bankruptcy filings, the Department expects that the extension of insurance coverage in 2014 and 2015 to those previously uninsured will lower medically related bankruptcy rates in California by about 5% from 2013 levels (see SRIA pages 5-8).

The lives saved estimate is based upon Department of Finance population estimates and a California Health Benefits Review Program Brief titled "Estimates of Sources of Health Insurance in 2014" (See SRIA Appendix A, pages 21-23)." (*extracted from* Form DF-131: Standardized Regulatory Impact Assessment Summary, 7/17/2015)

### *3.5.3 Department of Finance Comments*

"Finance, in general, concurs with the methodology used to assess the economic impact of the proposed amendments, although there are areas where impacts must be more fully discussed to meet the SRIA requirements. Although the additional cost that affected insurers incur in expanding providers would have negative ripple effects on the economic output, positive effects of reimbursements by insurers to providers must also be accounted for. In addition, clarification on how the direct impacts on insurers were translated into changes in demand for insurers' services is necessary. The SRIA described between 17 to 42 lives would be saved due to the proposed amendments. Given the extensive literature on the valuation of lives, the SRIA should provide an assessment of the monetary value of lives saved to better allow comparisons of tradeoffs.

As some insurers are likely to be more affected than others, these differences should be discussed. The SRIA estimated the total cost of having additional providers to the insurers based on the size of policyholders in a medical network. Insurers can provide multiple networks with different cost-sharing burden between consumers and insurers. Not all the insurers participate in all geographical regions in California, nor do they offer health insurance to all age groups. Finance's major regulations call for an assessment of distributional impacts when there are disparities in size or availability of insurers (e.g., large vs. small or urban vs. rural). If detailed information is not available, at a minimum a baseline discussion on network structure and insurers' services by geography would provide the background for possible differentiated impacts among consumers and the 262 affected insurers.

The filing and reporting requirements in the proposed amendments entail additional enforcement activities on the Department of Insurance. The SRIA



## SRIA Review

must describe resource impacts of these requirements on the department, and how these will be funded.” (*extracted from* Department of Finance Comments, 8/14/2015)

### 3.6 LED Efficiency

Agency: California Energy Commission (12-Aug-2015)

“The regulation is necessary to implement PRC Section 25402(c)(1), which requires the Energy Commission to “prescribe, by regulation, standards for minimum levels of operating efficiency to promote the use of energy efficient appliances whose use, as determined by the commission requires a significant amount of energy on a statewide basis.” The proposed general purpose light-emitting diode (LED) and small-diameter directional lamp energy efficiency standards meet this statutory mandate.” (*extracted from* Form DF-131: Standardized Regulatory Impact Assessment Summary, 8/12/2015)

#### 3.6.1 Methodology

REMI PI+

#### 3.6.2 Summary of Results

“Manufacturers are expected to pass on all incremental costs (see lamp costs to consumer and business). In 2017-2029 residential consumers will pay \$262 million in incremental costs for more efficient general purpose LED lamps. However, these consumers will have reduced costs of \$16 million for small-diameter directional lamps. Overall, residential consumers will see electricity bill savings of \$1.3 billion over the analysis period. California businesses will pay \$7.3 million in incremental costs for more efficient general purpose LED lamps. However, these consumers will have reduced costs of \$507 million for small-diameter directional lamps. Overall, California businesses will see electricity bill savings of \$3 billion between 2017 and 2029. Electric utilities will have lower sales of \$4.3 billion over the analysis period.

In addition to electricity costs and savings, there will also be significant greenhouse gas and air pollution reduction benefits from reducing consumption of electricity. Energy Commission staff estimated the value of reduced air pollution to be between \$62 million and \$140 million annually over the 2017-2029 period of analysis. Energy Commission staff estimate greenhouse gas emission reductions of 10.3 million metric tons and avoided damages of \$373 million over the same period of analysis. Avoided costs of purchasing allowances for the California Cap-and-Trade Program was estimated to be worth \$95 million, assuming a \$12 per ton allowance value.” (*extracted from* Form DF-131: Standardized Regulatory Impact Assessment Summary, 8/12/2015)

#### 3.6.3 Department of Finance Comments

“Finance generally concurs with the methodology used to estimate the annual impacts under the proposed regulations. However, there are two areas where

the analysis is incomplete. First, although the SRIA discussed the impact of cost savings and prices on businesses, the SRIA did not address the impact on new business creation and existing business elimination, as required by Government Code section 11346.3(b)(1)(B) which is implemented in the Finance's regulations [Cal. Code Regs. tit. 1, § 2003(a)(3)(B)]. Second, state agencies will be affected by the additional cost of compliant lamps and the ensuing electricity savings; the resource impact on these agencies and on the Energy Commission in terms of enforcement need to be illuminated in the SRIA as well. In addition, we suggest augmenting the analysis with additional sensitivity tests on the baseline, and additional explanations on some health benefits.

The Energy Commission acknowledged that new federal LED standards could replace the proposed standards prior to 2029. The description of the baseline should address this possibility and how it would affect the calculation of economic impacts, especially given that the costs of the regulation are front-loaded. If federal standards supersede California standards within the first few years of the regulation, both anticipated costs and benefits of the regulations could be lower.

The SRIA estimated a health benefit of \$33 to \$222 million due to the avoided electricity generation. A discussion on the sensitivity of assumptions, types of health effects (mortality vs. morbidity), and valuation of health effects would help explain uncertainty of the estimate. The Energy Commission used REMI to measure the macroeconomic impact of cost savings and COBRA to measure the air quality benefit of avoided electricity generation from reductions in electricity usage. The macroeconomic impact is cumulative over the years as more electricity savings are realized. The annual air quality impact may be more sensitive to the composition of particulate matters, nitrogen oxides, and sulfur dioxides, than the Energy Commission assumes.

Although the proposed regulations do not directly affect compact fluorescent lights, the Energy Commission may want to assess the possibility of switching out of these lights due to the special disposal requirement from their hazardous mercury content and the long-life span of LED lamps. The disposal convenience and large savings from the compliant lamps may prompt consumers to switch from compact fluorescent lights, leading to even larger environmental benefits, and the possible secondary effects of such conversions could be added to the analysis.” (*extracted from* Department of Finance Comments, 9/11/2015)

### 3.7 Mental Health Parity

Agency: Department of Insurance (23-Jan-2014)

“The purpose of the proposed regulation is to help bring an end to the problem of improper insurer delay and denial of medically necessary treatment for individuals with autism. The proposed regulation seeks to ensure that private insurers comply with the Mental Health Parity Act (MHPA) and fulfill their obligation to provide all medically necessary treatments and services to California's children with autism, subject to financial terms and conditions applicable to all benefits under the policy. Another objective of the proposed regulations is to interpret SB 946 (2011, Steinberg). The regulation will accomplish these objectives by interpreting and making more specific the MHPA and providing guidance to industry, stakeholders and consumers about the scope of the MHPA's provisions as they relate to autism treatment.” (extracted from Form DF-131: Standardized Regulatory Impact Assessment Summary, 1/23/2014)

#### 3.7.1 Methodology

Own actuarial model, expert consultation, and selected RIMS multiplier results.

#### 3.7.2 Summary of Results

“CDI used an annual model to incorporate how insurers responded with premium increases to changes in their requirements to provide mental health care. On a calendar year basis, the new amounts insurers put forward in rate filings for behavioral therapy coverage were \$24 million in 2012 and \$31.1 million (\$24+\$7.1) in 2013. The insurers filed a premium increase in a July 2012 mid-year filing (\$48 million covered for policies issued and renewed for a one-year period beginning July 1, 2012). An additional \$7.1 million was filed for policies issued and renewed in January 2013 for a calendar year. Insurers have two main time frames to adjust premiums, one in July and one in January, (see Table 5 in EIA, pg. 9)

This model was chosen because CDI had collected evidence that some insurance companies were picking up portions of mental health therapy treatments, yet others resisted. However, there was a clear industry trend toward insurers picking up more of the treatment cost, as stricter legislation passed and CDI took enforcement actions. Given that many different variables affected the market at different times, modeling insurers' obligations overtime was deemed the most accurate way to display and present the data.

CDI consulted industry experts, online job listings, and available wage data to estimate the annual cost of providing therapy. CDI's actuarial office provided empirical data on the timing and amounts of insurers' rate filings as well as the percentage of cost-sharing between insurers and policyholder copayments. CDI utilized RIMS II multipliers, published by the Bureau of Economic Analysis to

calculate the indirect and induced economic impacts.” (extracted from Form DF-131: Standardized Regulatory Impact Assessment Summary, 1/23/2014)

### 3.7.3 Department of Finance Comments

“While we do not disagree with any of the main conclusions of the SRIA, we have some suggestions that may make the effects of the regulation clearer.

The discussion of the economic impacts of the alternatives could be expanded. Alternative 1 suggests that not implementing the regulations would leave some individuals with access and some individuals without, or identical to the baseline. Alternative 2 seems to also simultaneously imply that there are other treatments that may be desirable to cover (imposing higher costs), but that there is no demand (which means no additional costs). Applying the same modeling techniques from the analysis to the alternatives would give a more concrete sense of the magnitudes of the economic impacts.

It may be useful to discuss, at least qualitatively, the impact of increased coverage and the evolution of costs for the autistic population after a greater proportion are covered. For the overall costs, the calculations of overall direct cost of treatment are particularly transparent and easy to follow. However, it would be instructive to have some sensitivity analyses regarding how the numbers may evolve in the future. After a few years of intensive treatment, will the costs decline markedly once the initial pent-up demand tapers off? While these are not required elements of a SRIA, they are natural questions that Insurance may find useful to have with the rest of the analysis.

Additional technical comments on the alternatives, costs to businesses, increases in health insurance enrollment and the methodology for using economic multipliers are attached to this letter (Attachment 1). We hope that our comments provide sufficient guidance for you to revise your analysis if necessary and for future analyses.” (extracted from Form DF-131: Standardized Regulatory Impact Assessment Summary, 2/6/2014)

### 3.8 Amendments to Truck and Bus Regulation

Agency: Air Resources Board (25-Feb-2014)

“The proposed Amendments are needed because they provided compliance flexibility to truck and bus fleet operators and enhance long-term compliance with the Regulation to Reduce Emissions From In-Use On-Road Diesel Vehicles, Drayage Trucks, Municipality and Utility Vehicles, Mobile Cargo Handling Equipment, Portage Engines and Equipment, Heavy-Duty Engines and Vehicle Exhaust Emissions Standards and Test Procedures and Commercial Motor Vehicle Idling adopted by the Air Resources Board in 2008. The Regulation reduces PM and NOx emissions, which are needed to comply with the mandated Federal and State Ambient Air Quality Standards for PM and NOx.

The Proposed Amendments to the Regulation to Reduce Emissions of Diesel Particulate Matter, Oxides of Nitrogen, and Other Criteria Pollutants From In-Use On-Road Diesel-Fueled Vehicles are intended to ensure the emissions reductions envisioned by the Truck and Bus Rule are achieved by providing time for these fleets to meet compliance requirements. This will be achieved through delaying of some compliance requirements.” (*extracted from Form DF-131: Standardized Regulatory Impact Assessment Summary, 2/25/2014*)

#### 3.8.1 Methodology

REMI PI+

#### 3.8.2 Summary of Results

Costs: None of the changes would make the Regulation more stringent; therefore, it would not increase costs to any individual business.

Benefits: The proposed Amendments would defer existing compliance requirements for three years for small fleets and lower use vehicles and would provide new options to give owners more flexibility. Estimated annual costs are from deferring truck replacement or PM retrofits by a few years and the changes in the associated annual operating cost.

The expected impact of the proposed Amendments would be to reduce the overall cost of the regulation by a little over \$400 million from 2015 to 2025. The economic impacts of the regulation include an increase in GSP of \$830 million in 2016 (highest savings year) and decrease of \$310 million in 2020 (highest expenditure year); additionally, an increase in personal income of \$500 million in 2016 and decrease of \$160 million in 2020. While the number of businesses created or eliminated are not quantified, the changes in the number of jobs will be an increase in 8,900 in 2016 (highest savings year) and a reduction of about 3,600 in 2020 (the highest expenditure year).” (*extracted from Form DF-131: Standardized Regulatory Impact Assessment Summary, 2/25/2014*)

### *3.8.3 Department of Finance Comments*

“As the regulation extends the time and gives additional flexibility to the trucking industry to comply with air quality regulations, we concur that reduced expenditures of at least \$621 million will accrue to the regulated trucking businesses in 2015 as a result of this proposed regulatory amendment. This SRIA fulfills all the requirements set forth in Finance regulations, and we broadly agree with its conclusions. However, we have some suggestions that may provide a more complete discussion of the issues raised by the regulations.

There could be a section added on differences in calculated impacts using discounted amounts and the methodology required by Finance's regulations, which requires an examination of annual disaggregated impacts. We understand that for some of ARB's other regulatory requirements, discounted amounts are needed. However, this may be confusing for readers if there are different numbers presented in the SRIA and other regulatory material. The two approaches also show different aspects of the trade-offs, and it would be valuable to discuss both within the SRIA.

Discussion of the two alternatives would benefit from more thorough modeling of the effects. Ideally, investigation of the alternatives would include the same level of analysis that was applied to the proposed major regulation. If advance consultations had been possible, we would also have recommended alternatives be chosen to illustrate the trade-offs on both sides. Both alternatives discussed are less costly to industry, but do not have adequate air quality benefits. It would have been instructive to investigate an alternative that was more costly to industry but better for air quality. Additional public outreach in the future could aid in identifying a wider scope of alternatives.

The analysis would also have benefited from a more thorough discussion of the health impacts. When the regulation was initially promulgated, the main trade-off was between the health impacts of cleaner air and costs to industry. The SRIA discusses changes to industry costs, but does not discuss the decreased health benefits with as much detail. Some evidence is provided that the changes will be marginal. Cross-references to the calculations in the original regulatory material could also be provided for readers interested in these aspects.”  
(*extracted from Department of Finance Comments, 2/28/2014*)

### 3.9 Compostable Materials

Agency: Department of Resources Recycling and Recovery (8-Jul-2014)

“The central purpose of the proposed regulations is to more effectively regulate solid waste facilities that handle compostable materials to protect public health, safety, and the environment. The proposed regulations modify the existing Compostable Material Handling Operations and Facilities Regulatory Requirements by: clarifying several feedstock definitions and the types of operations and facilities that can accept these materials; revising the maximum concentrations of metals allowed in compost to reflect changes adopted by US EPA; providing Enforcement Agencies with discretion to authorize temporary storage of additional material; revising Enforcement Agency inspection frequency language to ensure consistency throughout Title 14; providing operators and Enforcement Agencies with a mechanism to address chronic odor complaints and identify sources of odor; establishing criteria for safe land application of compostable material; requiring compost products to meet a 0.1% physical contaminant limit by weight; and clarifying small-scale composting requirements at sites, such as community gardens and schools. The proposed regulations provide a standardized regulatory framework for in-vessel digestion activities. Currently, in-vessel digestion activities are subject to either existing Transfer/Processing Operations and Facilities Regulatory Requirements or Compostable Material Handling Operations and Facilities Regulatory Requirements, depending on the nature of the feedstock and how it is handled. The proposed regulations combine transfer/processing and compostable material handling requirements into a stand-alone set of in-vessel digestion regulations, which will have marginal impacts on in-vessel digestion activities compared to existing regulations. The proposed regulations also clarify permitted maximum tonnage on the solid waste facility permit application.” (extracted from Form DF-131: Standardized Regulatory Impact Assessment Summary, 7/8/2014)

#### 3.9.1 Methodology

The REMI PI+ model employed for this analysis was "Software Build 1.5.2" (Build 3283, 6/4/2013). It is a one-region, 160-sector model, which was modified using the California-specific data for population, demographics and employment (as specified by the Department of Finance).

#### 3.9.2 Summary of Results

“Costs:

The Department estimates the economic impact of this regulation (including the fiscal impact) is over \$50 million.

Low Cost Scenario: \$804,967 - \$1,620,970

High Cost Scenario: \$50,770,999 - \$63,548,762



### Benefits:

The principal benefit of the proposed regulations is protecting public health, safety and the environment. Requiring compost products to meet a 0.1 % physical contaminant limit will reduce litter and minimize the amount of plastic entering surface water and the ocean while creating new jobs and increasing the market value of compost. Establishing criteria for safe land application of compostable material will reduce litter and minimize the amount of plastic entering surface water and the ocean and improve food safety and animal health by reducing toxic metals, disease-causing organisms, physical contaminants, and invasive/noxious species in compostable material. Other benefits of the proposed regulations include minimizing odors at compostable material handling and in-vessel digestion facilities; decreasing greenhouse gases, air pollution, and long-distance transportation of organic material by facilitating small scale composting; providing clarity to the regulated community and regulators. Finally, the regulations will ensure safe operations and facilities to handle organic material diverted as the result of California's goal to source-reduce, recycle, or compost 75% of the solid waste generated in the State by 2020. The new, "stand-alone" in-vessel digestion portion of the proposed regulations will establish a clear regulatory framework for the digestion of organic material. Digesting this material will decrease greenhouse gas generation and increase production of biofuels/bioenergy." (*extracted from Form DF-131: Standardized Regulatory Impact Assessment Summary, 7/8/2014*)

### 3.9.3 Department of Finance Comments

"Finance, in general, agrees with CalRecycle's approaches to the cost and total impact assessments. However, there are some areas where the SRIA needs to be strengthened with additional details and narrative.

First, the implication that higher costs on their own would create more jobs to the regulated waste management and remediation services industry is incorrect. This is likely due to the decision to change the rental cost of capital, as this affects substitution between capital and labor usage, leading to the positive job impacts. However, there does not seem to be any reason to change that parameter, and in general, higher costs should lead to job losses. For example, while the purchase of machinery and equipment benefits the sectors providing such services, these are additional costs to the regulated industry. On the other hand, if the regulation leads to growth in the supplying and regulated industries by offering greater certainty for investment, we would expect there could be positive job impacts overall. That argument should be made explicitly, even if the benefits are difficult to quantify.

Second, there are some errors in the submitted SRIA. Some of the economic impacts are characterized as indirect, rather than total, as in Table 3. This mislabeling changes how impacts are evaluated and needs to be corrected. In addition, while the presentation of compostable materials and in-vessel

## SRIA Review

digestion separately provides useful detail, it may be helpful to also report the total impact of the proposed regulations in these areas. Direct references to the results in Table 3 would make the discussions on job creation/elimination, competitive advantage/disadvantage and increase/decrease in investment more transparent.

Modeling the direct effects of Alternative 2 would also allow a more straightforward comparison to the impacts of the proposed regulations.

Finally, we suggest the introductory section be expanded to discuss the wider benefits that would be made possible with these regulations. Composting could play a large part in meeting California's goals to reduce or divert solid waste. Strictly speaking, these issues are outside the scope of the regulatory impact, but form a large part of the justification for the need to adopt these regulations. We think it would benefit the public's understanding to include such context.”  
(*extracted from* Department of Finance Comments, 8/4/2014)

### 3.10 California Competes Tax Credit Program

Agency: Governor's Office, GO-Biz (11-Aug-2014)

“Legislation requires GO-Biz to develop an application process to administer the California Competes Tax Credit (CCTC) and make determinations as to which tax payer will be granted the tax credit based upon a competitive foundation. As required by statute, the process must be open and transparent and candidates must be provided sufficient time to allow for the negotiations between GO-Biz and the applicant. In the 2013-14 fiscal year, thirty million dollars of tax credits were available for distribution. In order to implement the program in fiscal year 2013-14, emergency regulations were implemented on February 20, 2014. The emergency regulations are due to expire on August 20, 2014. GO-Biz is now completing the final permanent regulatory process.” (extracted from Form DF-131: Standardized Regulatory Impact Assessment Summary, 8/11/2014)

#### 3.10.1 Methodology

IMPLAN

#### 3.10.2 Summary of Results

“The proposed CCTC regulation provides the following economic benefits: (1) supports high wage job creation, (2) contributes to investments made in California, and (3) offers flexibility in the evaluation process to adjust for changes to the business climate. The cost of CCTC regulation is the tax revenue forgone, which could have been allocated to other government programs or given as a tax credit to individuals.” (extracted from Form DF-131: Standardized Regulatory Impact Assessment Summary, 8/11/2014)

#### 3.10.3 Department of Finance Comments

“Finance broadly agrees with the methodologies outlined in the assessment of CCTC, and the magnitude of the estimated impacts is appropriate. The SRIA is written in clear language, which allows the general public to understand the tradeoffs in the regulation. The discussion of the various benefits and costs are presented in a transparent manner, and allow the reader to see the resulting impacts. It may be helpful to also include a short discussion of the broad sectors to which the funding in 2013-14 was allocated, and how that differs from the sectors that were assumed to receive funds for the IMPLAN calculations. However, this is entirely optional.” (extracted from Department of Finance Comments, 8/12/2014)

### 3.11 Return to Work

Agency: Department of Industrial Relations (6-Oct-2014)

“These regulations are necessary to implement a \$120 million Return-to-Work program created by the Legislature in SB 863, the workers' compensation reform bill of 2012. The Legislature directed the Director of the Department of Industrial Relations to determine eligibility for payments based on studies of the workers compensation system. These regulations establish who may be eligible and how to apply for the payments. The regulations are essential because the funds cannot be paid put to injured workers until the eligibility criteria are established.” (*extracted from* Form DF-131: Standardized Regulatory Impact Assessment Summary, 10/6/2014)

#### 3.11.1 Methodology

Methodology unclear. No specific model, estimates taken from a previous RAND study.

#### 3.11.2 Summary of Results

“Although the injection of \$120 million into the economy annually is significant, the impact of the \$120 million will be offset by the increase in the assessment to employers to pay for the supplement. Under the proposed regulations the \$120 million will be going to workers who have significant wage loss, and therefore DIR expects that all, or almost all, of the supplement will be spent as received on basic items. This increased spending would lead to the creation of jobs. The assessment on employers however would mean that those employers would have less money to spend on hiring or business expansion.

These increases in spending by workers would be offset by this reduction in spending by businesses. Virtually all the resources involved are endogenous to the system and virtually none are exogenous. Since this employer cost will likely be passed on to all workers in the form of fewer jobs in the future, or lower wage growth over time, it is also a transfer from workers who do not experience a serious injury at work to seriously injured workers. We would expect that the net job impacts would be negative. The output impacts will also be negative, since all the costs are local (felt by firms paying assessments in California), while we can expect that while there will be consumer spending by the injured workers, those injured workers will only buy a certain proportion of goods made in California, likely around two-thirds based on Department of Finance assumptions. With higher costs of \$120 million, a multiplier of 2, and a leakage rate of one-third, the costs are \$240 million and the benefits from the spending will be \$160 million so the loss will be roughly \$80 million in aggregate. This loss would decrease to the extent that injured workers spend this money locally on locally produced products.

It is not expected that the supplement will have any substantial effect on capital investments, equipment, structures or real estate. DIR will be administering the distribution of the funds within existing budget constraints (estimated to be \$5 million) so the administrative aspects of the regulation, the application and eligibility determination would not have an effect on the economy.” (*extracted from DIR’s Standardized Regulatory Impact Assessment, 10/6/2014*)

### *3.11.3 Department of Finance Comments*

“Finance, in general, agrees with DIR's approaches to estimating the distributional and total impacts of the regulations. The analysis of alternatives also highlights some of the regulatory tradeoffs made, and the discussion of those impacts is helpful. There may be some areas where the SRIA could be strengthened with additional details and narrative, however, as suggested below.

DIR may want to expand its qualitative discussion on macro impacts of the proposed regulations. There could be a decrease in investment by the affected employers if they reduce their operations to minimize the burden of the \$120 million assessment. On the other hand, the higher levies may encourage them to invest as they innovate so as to reduce workers' injuries.

We also suggest the section on the industry-level impacts be expanded if there is data available. While the SRIA notes that the assessment to fund the \$120 million annually will be proportional to workers' compensation insurance, and hence fall more heavily on industries that currently pay higher insurance premiums, it would have been helpful to provide indicative numbers to illustrate this distribution. It would also be useful to complement this industry-level analysis with the offsetting impacts from personal consumption by workers receiving this benefit, rather than relying on statewide impacts and discussing industry impacts qualitatively. We think it would benefit the public's understanding to include such context, and compiling this information would be useful for future economic analysis.” (*extracted from Department of Finance Comments, 10/10/2014*)

### 3.12 Used Mattress Recycling and Recovery

Agency: Department of Resources Recycling and Recovery (16-Oct-2014)

“The Used Mattress Recovery and Recycling Program Regulations (regulations) are necessary to clarify existing statute and establish administrative procedures to efficiently implement the Used Mattress Recovery and Recycling Act, SB 254, Chapter 388, Statutes of 2013 (Act). Consistent with extended producer responsibility principles, the Program required by the Act will be designed, financed, and managed by members of the mattress industry via a mattress recycling organization (MRO) comprised of mattress manufacturers, renovators, and retailers. The MRO must develop and submit a Used Mattress Recovery and Recycling Plan (plan) for the recovery and recycling of used mattresses to CalRecycle by July 1, 2015. Thereafter, annual plan updates and budgets must be submitted to CalRecycle for review and approval. The proposed regulations will provide the clarity necessary for CalRecycle to provide effective oversight and enforcement of the Program in a fair and consistent manner, and more broadly, implementation of the Program will protect public health, safety, and the environment.” (*extracted from* Form DF-131: Standardized Regulatory Impact Assessment Summary, 10/16/2014)

#### 3.12.1 Methodology

The REMI PI+ model employed for this analysis was "Software Build 1.5.2" (Build 3283, 6/4/2013). It is a one-region, 160-sector model, which was modified using the California-specific data for population, demographics and employment (as specified by the Department of Finance).

#### 3.12.2 Summary of Results

“The Department estimates the initial net economic impact, upon program implementation, is \$1.7 million in 2016 (for the 20-percent recycling scenario) and \$1.1 million in 2016 (for the 50-percent recycling scenario). However, the 20-percent recycling scenario results in an annual positive net benefit of \$1.26 million after achieving the 20-percent recycling rate in 2024. The annual positive net benefit for the 50-percent scenario after reaching 50-percent recycling is \$7.78 million in 2024. Also, there is a GDP increase of \$11-\$26 million for the respective recycling scenarios in 2016.

In addition, the regulations will result in an indeterminate reduction in public agency costs associated with the end-of-life management of used mattresses, such as illegal dumping, blight, and associated health hazards. CalRecycle estimates that, for the 20-percent recycling scenario, 250,000 used mattresses will be kept out of landfills in 2016 as a result of the regulations. This would result in avoided consumer disposal fees of up to \$2.4 million.

Including indirect and induced economic impacts, 143 jobs will be created in 2016 for the 20-percent recycling scenario and 324 jobs would be created for

the 50-percent recycling scenario.” (extracted from Form DF-131: Standardized Regulatory Impact Assessment Summary, 10/16/2014)

### *3.12.3 Department of Finance Comments*

“Generally, Finance agrees with CalRecycle's conclusions that landfills will lose revenue, mattress recyclers will increase output, and consumers will not be affected very much if the MRO is able to recycle on the scale assumed without fee increases. However, the analysis could be strengthened with additional clarification on several points as follows.

First, the report should outline the expected method of operation for the MRO. This should include CalRecycle's estimate of the timing of the formation of the MRO and their general structure, including how they will interact with consumers and what service level they will provide. This is crucial for understanding how the mattress recycling industry will scale up from the current 5 percent of mattresses to 20-50 percent of mattresses, and for understanding why the market had not already implemented mattress recycling programs, if fees paid by consumers do not increase, it is unclear why the MRO would now undertake this new activity, since there are existing recyclers who could expand if it were profitable. Without sufficient incentives to consumers and producers, the projected benefits may not materialize. It would also benefit the public's understanding of how the regulation fits in with other recycling initiatives to report the avoided volume in landfill dumping. This would allow the reader to understand how much the mattress recycling program contributes to the 75 percent reduction in landfill waste by 2020.

Consumers currently pay the disposal fees and will continue to do so—either directly or indirectly—under the proposed regulations. Therefore, the proposed regulations would result in no impact on consumers unless fees increase. The report notes that two direct impacts of the regulation are infrastructure costs and labor costs for recyclers, which are omitted from the REMI model. Including these costs would necessitate higher fees for consumers. If fees increase above the current disposal fees due to the operation of the MRO, that would have to be modeled separately as an impact on consumers, and the benefits of the regulation may be overstated.

Beneficiaries of the disposal fees would switch from landfills to mattress recyclers under the proposed regulations. Because both sectors reside in the same sector in the model that CalRecycle has used for the analysis, there should be no impact of the disposal fees on this sector, although there may be an increase in labor intensity from breaking down mattresses rather than dumping. It is also unclear whether the negative impacts to landfills are taken into account with respect to jobs and output. The overall output impacts may thus be overstated. Additional distributional impacts include how the MRO would implement a plan to bring used mattresses to recyclers to avoid illegal dumping when there is no new mattress purchase involved—the efficacy of

## SRIA Review

these mechanisms would affect the recycling rate, and thus the economic impacts.

The report could usefully expand the discussion on the fiscal impact to state and local government of the proposed regulations, which may extend beyond the required CalRecycle staffing costs for oversight, education, and outreach. CalRecycle should identify the impact of the regulations on other governments or agencies, such as the impact on correctional facilities, or the avoided clean-up costs of illegal dumping for local governments. Furthermore, it is incorrect to assign increases in staffing costs to the REMI variable for increases in final demand for the office administrative services industry. Rather, the additional staff represents an increase in state employment that is to be paid for by the fees assessed.” (*extracted from Department of Finance Comments, 11/18/2014*)



### 3.13 Low Carbon Fuel Standard & Alternative Diesel Fuels

Agency: Air Resources Board (17-Oct-2014)

“The California Air Resources Board (ARB) approved the LCFS regulation in 2009 as a discrete early action measure under the California Global Warming Solutions Act of 2006 (AB 32). The primary goal of the LCFS regulation is to reduce the carbon intensity of transportation fuels used in California by at least 10 percent by 2020 from a 2010 baseline, thereby reducing greenhouse gas emissions, among other benefits discussed below. ARB approved revisions to the LCFS in December 2011, which became effective on November 26, 2012, and were implemented by ARB on January 1, 2013.

On July 15, 2013, the State of California Court of Appeal, Fifth Appellate District (Court) issued its opinion in POET, LLC versus California Air Resources Board (2013) 218 Cal.App.4th 681, resulting in a stay of the LCFS. The Court held that the LCFS adopted in 2009 and implemented in 2010 (referred to as 2010 LCFS) would remain in effect and that ARB could continue to implement and enforce the 2013 regulatory standards while taking steps to remedy California Environmental Quality Act (CEQA) and Administrative Procedure Act (APA) issues as required in the ruling.

To address the court ruling, ARB will bring a revised LCFS regulation (LCFS proposal) to the Board for re-adoption in early 2015. The proposed LCFS regulation will contain revisions of the 2010 LCFS as well as new provisions designed to foster investments in the production of the low-CI fuels, offer additional flexibility to regulated parties, update critical technical information, simplify and streamline program operations, and enhance enforcement.” (extracted from Form DF-131: Standardized Regulatory Impact Assessment Summary, 10/17/2014)

#### 3.13.1 Methodology

REMI PI+

#### 3.13.2 Summary of Results

“Benefits: The LCFS proposal is anticipated to deliver environmental benefits that include a cumulative estimated reduction in the greenhouse gas (GHG) emissions of more than 40 million metric tons of carbon dioxide equivalent (MMTC02e) from transportation fuels in California from 2016 through 2020. Implementation of the LCFS proposal will also diversify the transportation fuel portfolio, thereby reducing the economic impact of volatile global oil price changes on gasoline and diesel prices in California.

Costs: The estimated direct cost to regulated parties is highly sensitive to the price of LCFS credits, which are based on the supply and demand for credits in the market and cannot be forecast with certainty, as well the mitigation pathway chosen by biodiesel producers. From 2012 through 2013, when the

LCFS standards for gasoline and diesel were declining, the average credit price reported in the LRT was \$57. Based on historic credit prices and the fuel volumes that will be required to meet the increasing stringency of the LCFS proposal, ARB assumes a credit price of \$100 for the period 2016 through 2020. This method likely over-estimates costs because many (or even most) lower-CI fuels with embedded credits can be generated and secured at costs lower than the market price for stand-alone credits.” (*extracted from Form DF-131: Standardized Regulatory Impact Assessment Summary, 10/17/2014*)

### *3.13.3 Department of Finance Comments*

“Finance broadly agrees with the methodology used to assess the regulatory impacts, and agrees that the likely impacts would be to raise costs for carbon intensive suppliers, lower costs for less carbon intensive suppliers, and that these cost changes would be passed through to consumers. However, there are a number of areas where the discussion of potential impacts could be strengthened, particularly with respect to the changing supply of fuels.

The low carbon fuels standards assume that the supply of less carbon intensive fuels ramps up sharply before 2020. If this does not happen, the demand for credits would be much higher, leading to higher prices for producers and consumers. With a thinly-traded market for credits, the prices may in fact spike, as has been observed in other markets. Over time, the high prices would provide additional incentives to invest, but in the short term this would lead to much higher impacts on businesses and individuals. ARB has been discussing the relative tradeoffs in setting price floors and ceilings for credits in public meetings. If the floor is too low, there won't be the scale of investment needed, and if the ceiling is too high there may be disproportionate costs paid by consumers. Volatility in credit prices may also lead to very different incentives and impacts than what would hold under an average price scenario, since it is predictably high prices that are more likely to lead to investment. The issue of credit prices is central to how the regulatory impacts will play out, and that discussion should also be incorporated into the SRIA.

The incentives for innovation will also depend on whether demand for less carbon-intensive fuels will be met through new production in California, or whether such fuels would be imported. Again, this is related to the credit price and the relative cost points of California and external producers. It would greatly enhance transparency of the discussion to report these in terms of units that are more easily comparable, such as price increase per gallon or price decrease by kilowatt-hour. The overall impacts—to output, employment, and other variables—should also be reported in standard units such as constant dollars or numbers of jobs in addition to the percentages cited.

A natural question is how credit trading authorized by these regulations would relate to allowances offered under the cap and trade program. They are distinct programs, but they are all part of a multi-pronged approach to meeting the

requirements outlined in AB 32. The SRIA implies that one justification for low carbon fuel standards rests on the innovation aspect— simply increasing carbon prices would not give sufficient incentives to develop new fuels. The absence of new fuels would limit future opportunities to lower greenhouse gas emissions, and fostering that market is a key benefit of this regulation. Having such a market would also put California firms at a competitive advantage if more stringent federal or international carbon-intensity standards are implemented. The SRIA could do a better job of laying out how the low carbon fuel standards fit into the larger picture, and how the regulatory impacts may interact with other parts of the overall strategy for addressing carbon emissions.

The discussion of alternatives should be enhanced by including numbers so that readers can directly compare the impacts. Stating that there are lower costs under an alternative is not as useful as reporting on the magnitude of the difference. In the first alternative, we also suggest it should be designed so that there is the same carbon intensity standard for all transportation fuels, rather than just exempting diesel. That is, there should have been an offsetting decrease in carbon intensity for gasoline if diesel is exempted. This would raise costs for gasoline, which then could be compared to the avoided costs for diesel.

Some of the discussion of impacts for the alternative diesel fuel should also be expanded. The \$14.57 million cost for alternative diesel fuel implementation in 2022 far exceeds the total of \$880,600 annualized capital costs for two new refineries, \$40,000 annual operating and maintenance costs, and \$35,200 a year reporting and recordkeeping costs for biodiesel producers. We presume the difference stems from mitigation costs. If so, ARB needs to address how businesses will react in response. Otherwise, ARB needs to explain what else is included in that calculation, and how the impacts will be felt by businesses and individuals.

Finally, given the scale of new production assumed under the SRIA, there could be fiscal costs to the state for licensing, inspecting, and otherwise ensuring the new producers can scale up supplies. There could also be impacts from the price changes, as there are for other consumers. A discussion of total costs and benefits of proposed regulations and additional fiscal costs of administering a regulation should be outlined in the final regulations. This includes not just fiscal costs to ARB, but to other state agencies as well, such as the Department of Industrial Relations, or the California Department of Transportation. Including this in the SRIA would give more confidence that the scale of innovation and commercialization assumed is reasonable, and that government operations have been fully considered.” (*extracted from* Department of Finance Comments, 11/17/2014)

### 3.14 Hunting: Non-lead Ammunition

Agency: Fish and Game Commission (27-Nov-2014)

“Assembly Bill 711 (Chapter 742, Statutes of 2013) was signed by the Governor on October 11, 2013, and took effect on January 1, 2014. This legislative action amended Section 3004.5 of the Fish and Game Code, and requires the Fish and Game Commission (Commission) to promulgate regulations by July 1, 2015, to phase in the requirements of Section 3004.5 that will ban the use of lead ammunition when taking all wildlife with a firearm by July 2019.” (*extracted from* Form DF-131: Standardized Regulatory Impact Assessment Summary, 11/27/2014)

#### 3.14.1 Methodology

IMPLAN

#### 3.14.2 Summary of Results

“If full implementation precipitates more than the anticipated less than 5% reduction in hunting activity, the total economic impact in the following 12 month period (July 1, 2019 - June 30, 2020) could exceed \$27 million with a (5%) decline in hunting, if a (10%) decline in hunting by \$55 million, or if a (13%) decline in hunting total economic impact could decrease by \$71 million. Revenue to the Department could decline by \$1 million (5%), by \$2.2 million (10%) or by \$2.8 million (13%); state sales tax could decline by \$921,000 (5%) to \$1.8 million (10%) or by \$2,4 million (13%). Income tax could decline by \$325,000 (5%), by \$650,000 (10%) or by \$845,000 (13%).

Benefits are difficult to monetize: Reductions in exposure to toxic lead for wildlife, hunters and for those who consume wild game meat are anticipated.” (*extracted from* Form DF-131: Standardized Regulatory Impact Assessment Summary, 11/27/2014)

#### 3.14.3 Department of Finance Comments

“Finance concurs with the general approach used, which covers the channels where the regulations will affect businesses and individuals, and the use of an input-output model to link direct and total impacts. However, because the direct impacts of the regulation are incorrectly identified, the estimates of the total impact on output are overstated.

The direct impact of the regulation is the additional cost of non-lead bullets. The IMPLAN input-output model would translate these direct impacts to total impacts (direct, indirect, and induced) via multipliers. However, the Fish and Game Commission used a price elasticity model to assess some of the indirect and induced impacts on other hunting-related expenditures and then applied the multipliers to these results to calculate total impacts. Applying multipliers also to partial indirect and induced impacts overstates the total impacts. In

## SRIA Review

addition, it is incorrect to add the impacts on output and revenue together to derive the total impact of the regulation, because the output impact represents changes in production whereas the revenue impact describes changes in state funds.

Finally, the report mentions current shortages of non-lead ammunition in California. The availability of non-lead bullets and their price are key assumptions in modeling the impacts. If these underlying factors change, the impact assessments would clearly change as well, and perhaps should prompt a re-examination of the phasing. The report could add a section on why the current shortage is not expected to have an impact, or how the Fish and Game Commission plans to address these risks.” (*extracted from* Department of Finance Comments, 12/31/2014)

### 3.15 Appliance Efficiency

Agency: California Energy Commission (3-Dec-2014)

“The regulation is necessary to implement PRC Section 25402(c)(1) which requires the Energy Commission to "Prescribe, by regulation, standards for minimum levels of operating efficiency... to promote the use of energy and water efficient appliances whose use, as determined by the commission, requires a significant amount of energy or water on a statewide basis... that will reduce the energy or water consumption growth rates." The appliances in the scope of the regulations meet this criteria.” (*extracted from Form DF-131: Standardized Regulatory Impact Assessment Summary, 12/3/2014*)

#### 3.15.1 Methodology

REMI PI+

#### 3.15.2 Summary of Results

“In 2025 manufacturers will pass on all costs. In 2025 consumers will pay \$0.6M incremental costs and will see utility bill savings of \$251M for electricity, \$371M for natural gas, and \$324M for water. In 2025 California businesses will pay \$3M in incremental cost, and will see utility bill savings of \$42M for electricity, \$69M for natural gas, and \$160M for water. Utilities will have lower sales: \$293M in electricity and \$440M in natural gas. Water sales would decrease by \$484M, but agricultural customers are likely to purchase freed water resources.

There will also be significant greenhouse gas, air pollution, and environmental quality benefits to reducing the consumption of natural resources. The Energy Commission staff estimated the monetary worth of the air pollution reduction to be \$7M-15.7M in 2025. The Energy Commission staff estimate greenhouse gas reductions up to 2025 would avoid \$570M in damages using the federal social cost of carbon and have economic value of \$113M in California at a cap-and-trade value of \$12 per ton.” (*extracted from Form DF-131: Standardized Regulatory Impact Assessment Summary, 12/3/2014*)

#### 3.15.3 Department of Finance Comments

“While Finance agrees with the methodology used to derive the impacts under the proposed regulations, the analysis is missing some required elements.

First, there needs to be a section describing both the current situation with respect to efficiency standards (the baseline), and the direct impacts of the proposed regulation. The baseline must include a description of how businesses and individuals are affected by current efficiency regulations, as well as the levels of resources used under the baseline so that percentage improvements can be derived. The direct impacts of the proposed regulations

to businesses and individuals would then flow from the changes to the baseline. Assumptions underpinning the direct impacts also need to be explained. For example, the Energy Commission noted that the assumptions regarding the useful life of appliances (and therefore the rate of replacement) came from stakeholder inputs. There may be a large difference between appliance lifetimes from an engineering perspective and from a typical usage perspective. Likewise, efficiency of appliances may differ significantly from potential efficiency under typical usage (i.e. low-flow toilets that users tend to flush twice). The SRIA must provide sufficient information to allow the reader to understand how these assumptions affect the impact analysis.

Second, it appears that the direct costs and benefits of the regulations are improperly aggregated for individuals, and only the resulting net savings are modeled. Additional costs of buying more efficient appliances are relatively small compared to the derived water and energy savings. However, the beneficiaries of gross savings (appliance users) are different from those of efficient appliance spending (appliance manufacturers) and the entities that bear the burden of savings (energy producers) and costs (appliance buyers) are also different. Modeling net savings will fail to capture distributional effects of gross impacts, and the effects of both sides must be discussed in the report.

Regarding the effects on innovation and investment, the SRIA states that the regulations give an advantage to manufacturers of more efficient products, and also states that the proposed regulations are expected to lead to increased industry investment in technology. However, the SRIA contends that the incremental cost to produce more efficient appliances will be small. If research and development is needed to achieve additional efficiency gains, we would expect the direct incremental costs to manufacturers not to be as small as those reported. In addition, these costs are only reported in dollar figures at the aggregate level. It would be useful to report expected product price effects at a disaggregated level. This would help the reader evaluate the possible effect on subsequent consumer adoption/renovation rates.

Energy Commission staff did not select a more stringent level for the analysis of urinal and faucet alternatives, stating that one reason for this was the fact that none were proposed by stakeholders. It is the responsibility of an agency to identify and assess alternatives. The agency may use an alternative identified by a stakeholder, but the absence of suggestions does not absolve the agency of its responsibilities. Finance is available to consult on the design of alternatives to address this deficiency in the SRIA.

Finally, the SRIA should also address any fiscal impacts of the proposed regulations. This includes both the direct enforcement and implementation impacts, but also impacts associated with changing infrastructure needs. For example, low-flow toilets may require different technology in sewage plants. This section should also include a discussion of interactions with other state

## SRIA Review

regulations or policy objectives, such as reducing carbon emissions or lowering pollution.” (*extracted from* Department of Finance Comments, 1/2/2015)



Annex Table A1.1: Links to SRIA Submittal Documents

Date	Agency	Regulation	Standardized Regulatory Impact Assessment	Summary Form (DF 131)	Department of Finance's Comments	Agency Response to Comments	Revised SRIA/ Addendum
1 14-Jan-16	California Health Benefits Exchange	Eligibility and Enrollment	Eligibility and Enrollment SRIA(.pdf, <5 MB)	Eligibility and Enrollment SRIA Summary(.pdf, <5 MB)	DOF Comments on Eligibility and Enrollment (.pdf, <1 MB)		
2 20-Feb-15	Air Resources Board (ARB)	Oil and Gas Regulation	Oil and Gas SRIA**(.pdf, <1 MB)	Oil and Gas SRIA Summary**( .pdf, <1 MB)	*	*	*
3 27-Mar-15	Department of Transportation	Affordable Sales Program Regulation(www.dot.ca.gov, .pdf)	Affordable Sales Program SRIA (.pdf, <1 MB)	Affordable Sales Program SRIA Summary (.pdf, <1 MB)	DOF Comments on Affordable Sales(.pdf, <1 MB)	Response to Affordable Sales Comments(.pdf, <1 MB)	*
4 29-Apr-15	Air Resources Board	Oil and Gas Regulation	Oil and Gas SRIA (.jp)	Oil and Gas SRIA Summary(.jp)	DOF Comments on Oil and	*	*

SRIA Review

				df, <1 MB)	Gas(.pdf, < 1 MB)		
5	22-Jun-15	Air Resources Board	ZEV Credit Amendment	ZEV Credit Amendment SRIA (.pdf, <1 MB)	DOF Comments on ZEV Credits(.pdf, <1 MB)	*	*
6	17-Jul-15	Department of Insurance	Network Adequacy(.pdf, <1 MB)	Network Adequacy SRIA Summary(.pdf, <1 MB)	DOF Comments on Network Adequacy(.pdf, <1 MB)	*	*
7	12-Aug-15	California Energy Commission	LED Efficiency	LED Efficiency SRIA Summary(.pdf, <5 MB)	DOF Comments on LED Efficiency(.pdf, <1 MB)		
8	23-Jan-14	Department of Insurance (CDI)	Mental Health Parity(www20.insurance.ca.gov)	CDI SRIA Summary Form (.pdf, <1 MB)	Mental Health Parity - DOF Comments(.pdf, <5 MB)	*	CDI Addendum(.pdf, <1 MB)

SRIA Review

9	25-Feb-14	Air Resources Board (ARB)	Amendments to Truck & Bus Regulation(www.arb.ca.gov)	Truck & Bus Regulation SRIA(.pdf, <1 MB)	Truck & Bus SRIA Summary Form (.pdf, <1 MB)	Truck & Bus Regulation - DOF Comments(.pdf, <1 MB)	*	Revised Truck & Bus SRIA(www.arb.ca.gov, .pdf)
10	8-Jul-14	Department of Resources Recycling and Recovery (CalReCycle)	Compostable Materials, Transfer/Processing(www.calrecycle.ca.gov, .pdf)	Compostable Materials SRIA(.pdf, <1 MB)	Compostable Materials SRIA Summary(.pdf, <1 MB)	DOF Comments on Compostable Materials SRIA(.pdf, <1 MB)	Response to Compostable Materials Comments(.pdf, <1 MB)	*
11	11-Aug-14	Governor's Office of Business and Economic Development (GO-Biz)	California Competes Tax Credit(www.business.ca.gov, .pdf)	CA Competes SRIA(.pdf, <1 MB)	GO-Biz SRIA Summary(.pdf, <5 MB)	DOF Comments on CA Competes SRIA(.pdf, <1 MB)	*	*
12	6-Oct-14	Department of Industrial Relations	Return-to-Work	Return to Work SRIA (.pdf, <1 MB)	DIR SRIA	Comments on RTW SRIA (.pdf, <1 MB)	*	*

SRIA Review

1	16-Oct-14	Department of Resources Recycling and Recovery (CalRecycle)	Used Mattress Recovery & Recycling(.pdf, <1 MB)	Used Mattress SRIA (.pdf, <1 MB)	Used Mattress SRIA Summary(.pdf, <5 MB)	DOF Comments on Used Mattress SRIA (.pdf, <1 MB)	Response to Used Mattress Comments(.pdf, <1 MB)	Revised Used Matter SRIA(.pdf, <1 MB)
1	17-Oct-14	Air Resources Board	Low Carbon Fuel Standard & Alternative Diesel Fuels	LCFS and ADF SRIA (.pdf, <1 MB)	LCFS SRIA, SRIA,	ARB LCFS-ADF Comments(.pdf, <1 MB)	*	*
1	21-Nov-14	Fish and Game Commission	Hunting: Nonlead Ammunition	Hunting: Nonlead Ammunition SRIA(.pdf, <5 MB)	Nonlead Ammunition SRIA Summary(.pdf, <1 MB)	DOF Comments on Nonlead Ammunition(.pdf, <1 MB)	*	*
1	3-Dec-14	California Energy Commission	Appliance Efficiency	Appliance Efficiency SRIA (.pdf, <1 MB)	Appliance Efficiency Summary(.pdf, <1 MB)	DOF Comments on Appliance Efficiency(.pdf, <1 MB)	*	*
1	24-Dec-14	Department of Transportation	Affordable Sales Program(www.dot.ca.gov, .pdf)	Affordable Sales SRIA (.pdf, <1 MB)	Affordable Sales Summary(.pdf, <1 MB)	DOF Comment on Affordable Sales(.pdf, <1 MB)		

