Discussion of Findings Required by Government Code section 12894

January 2017

Pursuant to Government Code section 12894, subdivision (f), the California Air Resources Board (ARB) has submitted a letter to Governor Brown providing notice that ARB is proposing to link its greenhouse gas emissions trading program (Cap-and-Trade Program) with the Cap-and-Trade Program developed by the Province of Ontario and requesting that the Governor consider and make the findings necessary to support the linkage. This discussion document has been prepared to support the request and includes a brief background, a summary of Ontario's Cap-and-Trade Program, and a comparison of that program with California's program organized around four findings required by statute as a precondition to linking the two programs. A similar discussion document was prepared and submitted prior to linkage with Québec.[1]

Background

In 2012, the Legislature enacted Senate Bill (SB) 1018 (chaptered on June 27, 2012). That bill included provisions intended to ensure that any decision to link market-based compliance programs under AB 32 with a program in another jurisdiction would occur only after the Governor's consideration of four findings. Those provisions were codified in section 12894 of the Government Code. Under this law, prior to formally linking the Cap-and-Trade Regulation, ARB must notify the Governor, who then has 45 days in which to make (or decline to make) four specified findings which are to be submitted to the Legislature. (Gov. Code §12894, subds. (f) and (g).) The Governor shall also consider advice from the Attorney General within this 45 day timeframe. (*Id.*, at subd. (g).)

Similar to the process ARB undertook to respond to the direction in SB 1018 when proposing linkage with Québec,[2] ARB is formally requesting that the Governor make the required findings regarding Ontario's cap-and-trade legislation and provide those findings to the Legislature. The current ARB proposed amendments to the Cap-and-Trade Regulation, if the required SB 1018 findings are made and the Board adopts the amendments, would have California's Cap-and-Trade Program linked with Ontario's program beginning January 1, 2018.

Over the last several years, the Government of Ontario has been working to harmonize its own regulatory program to link with California and Québec. Ontario launched its Cap-and-Trade Program on July 1, 2016, and Québec and California are pursuing a linkage with Ontario starting in January 2018.

This discussion document provides background and support for ARB's request that the Governor make certain findings as a predicate to linking the Cap-and-Trade Programs developed by California and Ontario. The final Ontario regulations are also being

[1] California Air Resources Board, Discussion of Findings Required by Government Code section 12894, January 2013, https://www.gov.ca.gov/docs/ARB_Discussion_of_findings_SB_1018-Attachment_4.pdf.
[2] *See* California Air Resources Board, Cap-and-Trade Program, Linkage Web page, https://www.arb.ca.gov/cc/capandtrade/linkage/linkage.htm.

placed into the administrative record of ARB's current rulemaking to amend the California Cap-and-Trade Regulation to link with Ontario.

The Global Warming Solutions Act of 2006 (AB 32) directed ARB to develop a strategy and a suite of regulations to address climate change by limiting greenhouse gas emissions in 2020 to 1990 levels and to maintain and continue those reductions beyond 2020. AB 32 provides that ARB may adopt "market-based compliance mechanisms."[3] In enacting AB 32, the Legislature recognized the importance of partnerships in tackling climate change, finding that "national and international actions are necessary to fully address the issue of global warming," and directing ARB to consult with other states and nations "to facilitate the development of integrated and cost-effective regional, national, and international greenhouse gas reduction programs."[4]

The essence of a Cap-and-Trade Program is that regulated entities must each surrender a compliance instrument (emission allowance or limited offset credits) for each tonne of the entity's CO_2 equivalent emissions. The emission allowances are initially sold or distributed by the regulatory agency; each year the agency reduces the number of allowances available – the cap – until the desired level of emissions has been reached. The ability of regulated entities to buy and sell allowances among themselves, or to purchase offset credits issued for real, permanent, additional, verified and enforceable emission reductions from "offset projects," harnesses market efficiencies to facilitate the most cost-effective emission reductions. By reducing the number of allowances available over time, the desired emission reductions are also achieved reliably. Linking two or more such programs means that compliance instruments (i.e., emission allowances and limited offset credits) issued by two or more jurisdictions can be used interchangeably for compliance in either jurisdiction.[5] Linking programs expands the market, enhancing the flexibility such programs provide. Linking also allows for centralizing administrative functions, thereby improving efficiencies and offering the potential to reduce governmental costs. The success of any linkage depends on the responsible regulatory agencies employing equivalent rigor designing and implementing their respective programs, including requiring accurate emissions reporting and maintaining effective controls on the issuance of compliance instruments. As discussed below, California and Ontario have instituted equally rigorous programs.

Ontario's Program

In May 2016, Ontario's Climate Change Mitigation and Low-carbon Economy Act became law. This law sets out greenhouse gas reduction targets for 2020, 2030, and 2050 relative to 1990 emissions.[6] The Act authorizes and creates the framework for a Cap-and-Trade Program and allows for Ontario to link its Cap-and-Trade Program with corresponding Cap-and-Trade Programs in other jurisdictions. Ontario adopted its

---

[3] Health & Saf. Code §§ 38505, subd. (k) [definition], 38561 subd. (b) [scoping plan], 38562 [authority to regulate], 38570 [provisions governing market-based regulations].
[4] Health & Saf. Code §§ 38501, subd. (d), 38564.
[5] Gov. Code §12894, subd. (e).
[6] *See* Government of Ontario, Bill 172, Climate Change Mitigation and Low-carbon Economy Act ("Act"), May 19, 2016, at http://www.ontario.ca/laws/statute/s16007.

regulation to implement its Cap-and-Trade Program on May 19, 2016.[7] In general, Ontario's Cap-and-Trade Program is consistent with the recommendations in the Western Climate Initiative's Design Recommendations for the WCI Regional Cap-and-Trade Program.[8] Ontario has also adopted regulations related to the quantification, reporting, and verification of greenhouse gas emissions.[9] These regulations update previously enacted greenhouse gas reporting requirements initially adopted in 2009,[10] and are part of Ontario's implementation of its Cap-and-Trade Program. Due to differences in the rulemaking processes between California and Ontario, assessing Ontario's program requires a review of the Act, the Ontario Cap-and-Trade Regulation, and the Ontario Quantification, Reporting and Verification of Greenhouse Gas Emissions Regulation to gain a comprehensive view of the requirements of the Ontario Cap-and-Trade Program.[11]

In November 2016, Ontario proposed additional amendments to its Cap-and-Trade Regulation, including targeted amendments to further clarify allocation provisions and to fully align certain information sharing and tracking system holding account provisions with California's regulation.[12] Also in November 2016, Ontario released a proposal for amendments to its Cap-and-Trade Regulation to incorporate Ontario's offsets program.[13] The Cap-and-Trade and reporting regulation amendments went into effect January 1, 2017, and the offsets proposal is proposed to be in effect toward the end of the first quarter of 2017. Ontario's Ministry of the Environment and Climate Change has provided a summary of their program and pending amendments to ARB.

[7] Ontario Regulation ("O. Reg.") 144/16 The Cap and Trade Program (May 19, 2016), *available at* https://www.ontario.ca/laws/regulation/r16144.

[8] Western Climate Initiative, Design for the WCI Regional Program (July 2010), *available at* http://westernclimateinitiative.org/component/remository/general/program-design/Design-for-the-WCI-Regional-Program. California, Ontario, and Québec were all Partner jurisdictions in the Western Climate Initiative (WCI), a collaboration of seven U.S. states and four Canadian provinces that worked together since 2007 to identify, evaluate, and implement policies to address climate change. *Id.* at 1. Whereas WCI was a policy collaboration, the Western Climate Initiative, Incorporated (WCI, Inc.) described later in this document is a non-profit corporation formed to provide administrative and technical services to support the implementation of state and provincial greenhouse gas emission trading programs. WCI, Inc. Web site, http://www.wci-inc.org/. WCI, Inc.'s Board of Directors currently includes officials from the Provinces of Québec, British Columbia, Ontario, and the State of California. *Id.*

[9] O. Reg. 143/16 Quantification, Reporting, and Verification of Greenhouse Gas Emissions (May 19, 2016), *available at* https://www.ontario.ca/laws/regulation/r16143.

[10] O. Reg. 452/09 Greenhouse Gas Emissions Report (first adopted Dec. 1, 2009), *available at* https://www.ontario.ca/laws/regulation/090452.

[11] As part of ARB's Staff Report: Initial Statement of Reasons for the ongoing rulemaking to amend the California program, including through the proposed linkage with Ontario, ARB staff issued an appendix (Appendix D – Summary of the Cap-and-Trade Program in Ontario, Canada) that describes Ontario's program in further detail. This appendix is available at: https://www.arb.ca.gov/regact/2016/capandtrade16/appd.pdf.

[12] Ontario Environmental Registry, Proposed Amendments to Cap and Trade Program Regulations (November 4, 2016), https://www.ebr.gov.on.ca/ERS-WEB-External/displaynoticecontent.do?noticeId=MTMwODQ5&statusId=MTk4MjEw&language=en.

[13] Ontario Compliance Offset Credits Regulatory Proposal ("Ontario Offset Proposal") (Nov. 4, 2016), *available at* http://www.downloads.ene.gov.on.ca/envision/env_reg/er/documents/2016/012-9078.pdf.

For the reasons discussed below, the Governor may find that linkage with Ontario's program satisfies the four findings required by Government Code section 12894. The remainder of this discussion is organized according to those four findings.

A. "Equivalent to or stricter than"

The first finding required by Government Code section 12894 subd. (f) focuses on the strength of the proposed linking partner's program:

> *(1) The jurisdiction with which the state agency proposes to link has adopted program requirements for greenhouse gas reductions, including, but not limited to, requirements for offsets, that are equivalent to or stricter than those required by Division 25.5 (commencing with Section 38500) of the Health and Safety Code.*

The potential equivalence of California's and Ontario's climate programs can be evaluated by reviewing several factors. For assessing equivalency of Ontario's program, it is helpful to compare each jurisdiction's emission reduction goal, the role of the Cap-and-Trade Program in achieving each jurisdiction's reduction goal, and the rules and requirements incorporated into each jurisdiction's Cap-and-Trade Program legislation. It is important to evaluate the stringency of other programs to ensure the greenhouse gas (GHG) emissions reductions goals in the California program are not adversely impacted through linkage with another program.

Emission Reduction Goals. Both California and Ontario define their 2020 emission reduction goals relative to their 1990 emissions. California's 2020 goal, defined in AB 32, is to reduce emissions to 1990 levels by 2020. Ontario's 2020 goal, defined in its Climate Change Mitigation and Low-carbon Economy Act, 2016,[14] is to reduce emissions to 15% below 1990 levels by 2020. Both the California and Ontario reduction goals are codified in their legislation. In this respect, the 2020 Ontario climate program goal is more stringent than the California 2020 goal.

In 1990, California greenhouse gas emissions were 431 million metric tons of CO_2 equivalent ($MMTCO_2e$),[15] or about 14.48 metric tons per capita. In 1990, Ontario's emissions were 182 $MMTCO_2e$,[16] or about 17.65 metric tons per capita. Emissions have been lowered to 12.43 metric tons per capita as of 2014 as a result of climate actions taken by Ontario, most notably the phase-out of coal in electricity generation.

California and Ontario also have 2030 and 2050 goals for reducing greenhouse gas emissions. California's 2030 goal, codified in Senate Bill 32 (SB 32), is a 40 percent

---

[14] *See* Act.

[15] *See* California Air Resources Board, California 1990 Greenhouse Gas Emissions Level and 2020 Emissions Limit Web site, https://www.arb.ca.gov/cc/inventory/1990level/1990level.htm.

[16] National Inventory Report 1990-2013: Greenhouse Gas Sources and Sinks in Canada; The Canadian Government's Submission to the UN Framework Convention on Climate Change (Environment Canada 2015), Part III, p. 54, *available at* http://unfccc.int/files/national_reports/annex_i_ghg_inventories/national_inventories_submissions/application/zip/can-2015-nir-17apr.zip.

reduction from the 1990 level by 2030.[17] California also has a 2050 goal of reducing emissions 80 percent below the 1990 level by 2050.[18] Ontario has codified a target of a 37 percent reduction from its 1990 level by 2030, and a target of an 80 percent reduction by 2050.[19] The Québec and Ontario Cap-and-Trade Programs have identified annual caps for their Cap-and-Trade Programs only through 2020. As California moves forward with post-2020 allowance budgets to reflect California's 2030 goals, Québec and Ontario will be proposing post-2020 GHG caps that reflect their jurisdictional GHG emissions reduction targets and that are consistent with the Design Recommendations for the WCI Regional Cap-and-Trade Program established by California, Québec, and Ontario through WCI.[20]

Since 2003, Ontario has significantly reduced GHG emissions through its coal reduction plan and legislation. From 2005 to 2015, GHG emissions in Ontario's electricity sector decreased by approximately 87 percent.[21] Ontario's early action on coal power generation demonstrates strong leadership in reducing GHGs. Further, these reductions are already reflected in the caps (annual allowance budgets) established by Ontario for 2017 through 2020. Ontario's legislation requires that Ontario's caps are determined with reference to the targets. While Ontario's target uses the 1990 reference level, the caps in the Cap-and-Trade Regulation are based on recently reported emissions for the covered sectors.[22] By establishing the initial cap based on the actual GHG emissions data, the Ontario Cap-and-Trade Program avoids over allocation and aligns the caps with the actual emissions expected to occur in the covered sectors. This ensures the GHG reductions needed to meet the 2020, 2030, and 2050 targets will continue to happen. As a result of Ontario's and California's similar approaches to establishing their annual caps, Ontario's program is at least as stringent as the California Cap-and-Trade Program.

Based on these considerations, overall, the Ontario emissions reduction requirements are equivalent to or stricter than California's goal.

<u>Role of the Cap-and-Trade Program</u>. Both California and Ontario have designed their respective Cap-and-Trade Programs to support the attainment of their emission reduction goals in concert with other programs. In both jurisdictions, the emissions permissible under the Cap-and-Trade Program plus the emissions that are not covered by the program sum to their respective 2020 emissions reduction targets. The total amount of emission allowances in each program from 2017 to 2020 was also developed using the same method, which incorporates expected emissions that will be covered by

---

[17] Senate Bill 32 (Pavley, Chapter 429, Statutes of 2016), *available at* https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201520160SB32.
[18] The State's 2050 goal to reduce GHG emissions to 80 percent below 1990 levels, as reflected in Executive Orders (EO) B-30-15, S-3-05, and EO B-16-2012, is consistent with an Intergovernmental Panel on Climate Change analysis of the trajectory that would stabilize atmospheric GHG concentrations at 450 parts per million carbon dioxide equivalent and reduce the likelihood of catastrophic climate change.
[19] *See* Act § 6.
[20] *See supra,* footnote 8.
[21] Ontario Ministry of Energy, The End of Coal Web site, http://www.energy.gov.on.ca/en/archive/the-end-of-coal/ (accessed December 11, 2016).
[22] *See supra,* footnote 11.

the program from 2017 to 2020. That method for defining the emissions permissible under a Cap-and-Trade program was recommended by the Western Climate Initiative Partner jurisdictions, including California, Québec, and Ontario.[23] In this respect, the Cap-and-Trade programs in California and Ontario have equivalent roles in each jurisdiction's overall emissions reduction program.

Cap-and-Trade Program Rules and Requirements. Due to extensive collaboration as California and Ontario participated in WCI, the two Cap-and-Trade Programs share many identical features. Simultaneous with California's regulatory development, ARB staff collaborated with other states and Canadian provinces to develop and refine general program design documents intended for use by WCI Partner jurisdictions that choose to institute Cap-and-Trade Programs. The resulting Design Recommendations for the WCI Regional Cap-and-Trade Program referenced above incorporate the principal elements ultimately reflected in the adopted California and Ontario regulations.[24] Both jurisdictions are committed to a continuing collaboration to ensure that both programs maintain their equivalence.

Similarly, California's reporting regulation – an integral part of an effective Cap-and-Trade program – formed the basis for WCI's "Essential Requirements for Mandatory Reporting" in 2009, amended and published by WCI in 2010, as the "Final Harmonization of Essential Reporting Requirements in Canadian Jurisdictions" (Essential Requirements). Ontario adopted a reporting program closely patterned on that WCI document, customized for Ontario's particular industrial sector makeup.

The California and Ontario program regulations include identical features to ensure the efficacy of the emissions cap and to facilitate fair and equitable access to an efficient market for compliance instruments. ARB and Ontario staff conducted line-by-line comparisons of the respective program regulations to harmonize them in every respect needed to ensure the environmental integrity and compatibility of the programs. California and Ontario's programs are fully harmonizing relevant requirements, as reflected in the regulatory amendments adopted by ARB in June 2012, those currently proposed in ARB in its current rulemaking, and those adopted by Ontario in May 2016 (with final amendments taking effect January 1, 2017). The following are several highlights of the program requirements, with references to the corresponding portions of the California and Ontario regulations.

- *Verified emissions reporting*. Both California's and Ontario's reporting regulations are consistent with WCI's Essential Requirements document. Both programs require reporting at a 10,000 $MTCO_2e$ threshold and more rigorous requirements related to reporting above a 25,000 $MTCO_2e$ level, which is the threshold at which entities become mandatorily subject to the Cap-and-Trade Program under both California's and Ontario's regulations.[25]

[23] *See* Guidance for Developing WCI Partner Allowance Budget, Western Climate Initiative, 2010, at: http://www.westernclimateinitiative.org/document-archives/Cap-Setting-and-Allowance-DistributionCommittee-Documents/Guidance-for-Developing-WCI-Partner-Allowance-Budgets/.
[24] *See supra*, footnote 8.
[25] *See* Monitoring and Reporting Regulation, 17 CCR § 95100 et seq., and O. Reg. 143/16 §§ 5(2) and 10, available at https://www.ontario.ca/laws/regulation/r16143.

Both programs similarly define the boundaries for reporting entities as facilities at a common location and affiliated with the same company.[26] Each jurisdiction uses its own specific terms to describe the boundaries based on the common usage of terms in each jurisdiction. Ontario and California both require instrument calibration to ensure accuracy.[27] Ontario reporting entities are required to verify quantification and emissions in accordance with International Standards Organization (ISO) standards, which provides an additional incentive to maintain accurate devices so as to preserve their certification. California and Ontario reporting regulations require a ±5% accuracy standard for sampling, analysis, and measurement instruments.[28]

Both programs prescribe methods for estimating data that is missing, for example due to a malfunctioning meter. Both programs require that the substituted data are conservatively chosen based on operating conditions in the periods immediately before and after the missing time period, albeit using slightly different strategies.[29] California uses a more graduated approach that varies depending on how much data is missing. Because both approaches are consistent with U.S. EPA's reporting requirements and WCI's recommended methods, they are considered to be equivalent.

Once an entity prepares its annual emissions report, both jurisdictions require the report to be verified by an accredited third-party verifier to ensure data quality. Both verification programs are based on ISO standards and are consistent with WCI's Essential Requirements.

- *Program coverage of greenhouse gases*. California and Ontario's programs apply to the same seven greenhouse gases.[30] Like Québec, Ontario's Cap-and-Trade Program is broader than California's by including all of the gases included in AB 32 in both its reporting and Cap-and-Trade regulations, including SF6 and perfluorocarbons from the electricity sector, process and fugitive emissions from magnesium production, and high global warming potential (high-GWP) gas emissions from electronic manufacturing. California opted to regulate those high-GWP gases in separate direct regulations, outside of the Cap-and-Trade Program.

- These regulations are the SF6 Emissions Reductions from Gas Insulated Switchgear Regulation (2010), the regulation regarding Small Containers of Automotive Refrigerant (2009), and the Regulation for Management of High Global Warming Potential Refrigerants for Stationary Sources (2009). As such, both California and Ontario require the reporting and reduction of emissions from these sources, even though the regulatory programs employ different strategies.

[26] O. Reg. 143/16 § 1; 17 CCR § 95102 subd. (a).
[27] O. Reg. 143/16 § 4(3), referencing Guideline for Quantification, Reporting and Verification of Greenhouse Gas Emissions ("Guideline"), *available at* http://www.downloads.ene.gov.on.ca/envision/env_reg/er/documents/2016/012-8953%20guideline.pdf; 17 CCR § 95103, subd. (k).
[28] *Id.*
[29] *See for example*, Guideline at ¶¶ ON.45, ON.55, ON.85, ON.95, ON.105, and ON.185; 17 CCR §§ 95112-95129.
[30] Act § 5 and O. Reg. 143/16 § 2; 17 CCR § 95810.

- *Government control over emissions allowances*. Both California and Ontario tightly control the number of emission allowances issued each year, resulting in a declining cap.[31] Each instrument is given a unique serial number, and is tracked in a system common to both jurisdictions. California and Ontario both distribute allowances through free allocation and auctions.[32] Both programs encompass over 80% of total greenhouse gas emissions, including emissions from about 600 California facilities, and from about 160 Ontario companies.

- *Compliance Instrument Surrender*. Based on the verified emissions, both California and Ontario entities will need to surrender a corresponding number of compliance instruments.[33] Each program provides that failure to surrender on schedule will result in a three-to-one obligation for each un-surrendered compliance instrument.[34]

- *Allowance Reserve to Contain Prices*. Both programs incorporate a reserve of emission allowances that will be made available at quarterly reserve sales at set prices.[35] California and Ontario fill their respective reserves from within their program allowance caps, each using about 5 percent of the total emission allowances in the program. The respective reserve sales will be available only to covered entities from the jurisdiction conducting the sales. To qualify to purchase allowances from the reserve in Ontario, a capped participant (the equivalent of a covered entity in California) must have no allowances in its general holding account that may be submitted for the current compliance period. This requirement limits the Ontario reserve allowances to capped participants unable to otherwise obtain allowances.[36] California's program does not include this requirement, making allowances from the California reserve more accessible to California's covered entities.

- *Anti-fraud provisions*. Both Ontario and California require the buyer and seller to take affirmative steps to confirm transfers of compliance instruments, to foil unauthorized transactions by hackers.[37] Both programs also have provisions forbidding providing false information to, or withholding material information from, any party in connection with a transaction.[38]

- *Holding limitations*. Both programs incorporate the same limitations on the number of compliance instruments one entity or affiliated group can hold, to prevent any party from accumulating holdings that would enable the exercise of market power.[39]

---

[31] O.Reg. 144/16 § 54; 17 CCR § 95820.
[32] Act § 31; O.Reg. 144/16 §§ 56 and 58; 17 CCR § 95840 et seq.
[33] Act § 14; O. Reg. 144/16, Part III; 17 CCR §§ 95850, 95856.
[34] Act § 14(7); O. Reg. 144/16, Part III; 17 CCR § 95857.
[35] O.Reg. 144/16 §§ 55 and 59; 17 CCR §§ 95910-95914.
[36] O.Reg. 144/16 § 78.
[37] Act § 29; O.Reg. 144/16 § 51; 17 CCR § 95921.
[38] Act § 29; 17 CCR § 95921 subd. (e).
[39] O.Reg. 144/16 §§ 40 and 42; 17 CCR § 95920.

- *Limited offsets subject to detailed protocols*. Under the programs currently in force, the offset components are equivalent, and Ontario's proposed regulations on offsets provide further evidence of this equivalency. California and Ontario both limit the use of offset credits to eight percent of an entity's compliance obligation under the current regulations.[40] In Ontario, like in California, the offsets themselves must be approved by the government, and will be based on standards ensuring that the emission reductions are real, quantifiable, permanent, enforceable, additional, and verifiable.[41] As with allowances, offsets issued by each jurisdiction are fully fungible and once issued, recognized as a valid compliance instrument for a linked market program. A California and Ontario entity may use a combination of California or Québec or Ontario issued offsets up to the offset limit of eight percent to meet its compliance obligation. As with other trading program provisions, WCI partners, including Ontario, developed and released recommendations regarding model offset program requirements. The "WCI Offset System Essential Elements Final Recommendations Paper" issued in 2010 (Offset Elements) incorporated the AB 32 requirements for offsets (real, additional, permanent, enforceable, verifiable, and quantifiable). These requirements have been included in Ontario's Compliance Offset Credits Regulatory Proposal, which is expected to take effect in early 2017.[42] (Ontario will not issue offsets until this Regulatory Proposal is effective.) California and Ontario's programs are already equivalent, and the Regulatory Proposal provides further evidence of this equivalency.

  To qualify as an offset under Ontario's proposed offset component of its program, emission reductions must be additional, permanent, and accurately and conservatively quantified. Ontario has yet to approve any specific offset protocols, but has commenced a process to assess various protocol types.[43] To maintain quality, offset projects must fall within a limited number of approved protocols. Ontario's protocols and resulting offset projects, like California's, will address greenhouse gas sources that no other linked jurisdiction regulates. Ontario's proposal, similar to Québec, would limit approved projects to those in Canada (except that no Ontario-approved projects would originate in Québec; Québec would be the sole issuance authority for any projects within its jurisdiction). That requirement is parallel to California's regulation, with California's currently approved protocols extending only within the United States.[44] Based on ARB staff's assessment of Ontario's Compliance Offset Credits Regulatory Proposal, as well as

[40] O.Reg. 144/16 §§ 16 and 18; 17 CCR § 95854.
[41] Act §§ 34-37; *see also* Ontario Offset Proposal § 12 (Ontario's Compliance Offset Credits Regulatory Proposal, which ARB staff understands will go into effect toward the end of the first quarter of 2017, further specifies the statutory requirements in the Act, consistent with the requirements of AB 32); 17 CCR § 95970.
[42] *See* Ontario Offset Proposal.
[43] *See* Ontario Ministry of the Environment and Climate Change, Cap and trade: offset credits and protocols Web page, https://www.ontario.ca/page/cap-and-trade-offset-credits-and-protocols#section-0.
[44] Ontario Offset Proposal § 2; 17 CCR § 95972. As part of the WCI discussions, California, Québec, and Ontario jointly agreed that WCI partner jurisdictions should only issue offsets for projects in the boundaries of their respective countries. This policy reflects sovereignty and enforcement differences between jurisdictions, not differences in design stringency. As indicated in the appendix referenced in footnote 11 (*see* Appendix D, at p. 9), "Ontario would issue offsets in Canada, except for projects located in Québec. And, Québec would continue to issue offsets in Canada, but no longer for projects located in Ontario."

discussions regarding the ongoing assessment of different protocol types, the Ontario offset program meets the AB 32 offset requirements. California, Québec, and Ontario will collaborate on the development of any additional protocols, to ensure that all future offset protocols also meet the requirements of AB 32.

Ontario's offset requirements include annual reporting, documentation, and verification of emission reductions for each individual offset project, similar to California's offset requirements. The verification body must be free of conflicts of interest.[45]

In the event an offset is later invalidated, Ontario has recourse to the offset developer, similar to the approach taken in Québec. If the offset developer is unable to replace the invalidated offsets, Ontario will withdraw replacement offsets from a buffer account. This buffer account is filled by requiring that each offset project place 3% of its issued offsets into the account.[46] The buffer account is managed by Ontario. California employs a different strategy regarding invalidated offsets. If an offset is invalidated, the offset itself is removed from the program. If the offset had been used for compliance, the party that surrendered the offset credits is required to obtain and surrender replacements. Under both programs, the stringency of the program is preserved through the replacement of any invalidated offsets, resulting in equivalent outcomes.

Overall, the harmonization of the program regulations results in equivalency in the two programs' environmental integrity, compliance requirements, and market rules.

B. *Linkage with Ontario will not impede California's ability to enforce its laws.*

The second finding required by Government Code section 12894 subd. (f) concerns California's continued ability to enforce its Global Warming Solutions Act:

> *(2) Under the proposed linkage, the State of California is able to enforce Division 25.5 (commencing with Section 38500) of the Health and Safety Code and related statutes, against any entity subject to regulation under those statutes, and against any entity located within the linking jurisdiction to the maximum extent permitted under the United States and California Constitutions.*

Linkage with Ontario will not impede California's ability to enforce its regulations to the maximum constitutionally-permissible extent. Under well-established interpretations of due process, persons who participate in California's program are subject to California's jurisdiction.[47] Persons who only participate to buy and sell compliance instruments are

[45] Ontario Offset Proposal §§ 13.4 [report], 13.5-13.6 [report verification], and 13.5 [conflicts of interest (citing to O.Reg. 143/16)]; 17 CCR §§ 95976 [annual report], 95977 [report verification], 95979 [conflicts of interest].
[46] Ontario Offset Proposal § 17; compare 17 CCR § 95985.
[47] *See International Shoe Co., Inc. v.* Washington, 326 U.S. 310 (1945) [requiring minimum contacts such that exercise of jurisdiction does not offend traditional notions of fair play and substantial justice].

included; the regulation provides that "[a]ny party that participates in the Cap-and-Trade Program is subject to the jurisdiction of the State of California."[48]

Participation in a Cap-and-Trade Program would require registration in one of the jurisdictions that is linked or proposed for linkage (California, Québec, or Ontario). California registrants expressly submit to California's jurisdiction[49] and must provide a California address and designated representative to allow for prompt service of process.[50] Before bidding in California's auction, any bidder must pre-qualify by both registering and tendering a guarantee, such as a letter of credit or bond.[51]

For the Governor to make this finding, California must be able to enforce Division 25.5 against entities in Ontario to "the maximum extent permitted under the United States and California Constitutions." Persons who register and participate in Ontario's trading program come under Ontario's jurisdiction, just as persons who participate in California's program are subject to California's jurisdiction. If an Ontario entity were to register directly with California, that entity would agree to be subject to California's jurisdiction, waiving any constitutional limitations. Persons registered in Ontario will provide information equivalent to that collected by California, which will allow Ontario to take legal action if appropriate. In order to support one another's enforcement efforts, California and Ontario will continue to cooperate and to share information. Finally, like its counterparts in California and Québec, the Ontario Securities Commission has an established relationship with the Commodity Futures Trading Commission, which has jurisdiction over certain derivative instruments, trading of which could affect the market for compliance instruments.

C. *Ontario has equivalent or stricter enforcement tools.*

The third finding required by Government Code section 12894 subdivision (f) is that:

> *(3) The proposed linkage provides for enforcement of applicable laws by the state agency or by the linking jurisdiction of program requirements that are equivalent to or stricter than those required by Division 25.5 (commencing with Section 38500) of the Health and Safety Code.*

Ontario has a range of enforcement tools that are comparable to, and in some cases more stringent than, those available under California law. These tools include administrative authority, court-imposed penalties, and other forms of enforcement. Several tools are authorized by Ontario's Climate Change Mitigation and Low-carbon Economy Act**,** 2016 ("Act"), which governs Ontario's Cap-and-Trade Program and empowers Ontario's Ministry of the Environment and Climate Change to take certain actions.[52] In addition to the Act, Ontario has other options for pursuing enforcement under provincial and Canadian federal law.

---

[48] 17 CCR §§ 96010, 96022.
[49] 17 CCR § 95832 subd. (d) ("I consent to the jurisdiction of California and its courts for purposes of enforcement of the laws, rules and regulations pertaining to title 17, article 5, sections 95800 et seq.[.]").
[50] 17 CCR § 95830 subd. (c)(6).
[51] 17 CCR § 95912 subd. (f), (j).
[52] Act §§ 50-59.

As to administrative tools, Ontario's Act authorizes the Ministry to impose administrative penalties to ensure compliance and to prevent persons or entities from deriving an economic benefit as a result of a violation of the Act.[53] Ontario's Ministry may impose such penalties directly; ARB, by contrast, must seek penalties through the judicial process or an administrative law judge.[54] Ontario may also impose restrictions on entities that are out of compliance, including the power to automatically suspend accounts of registered participants.[55] This authority is superior or equivalent to that found under California law.[56] In addition, as under California's regulation, entities that fail to surrender the number of required allowances in Ontario's program must make up for the shortfall and submit an additional three allowances for every one missed.[57]

In addition to administrative measures, Ontario's Act provides that a court may impose significant penalties for violations thereof. The penalty scheme in Ontario's law is more tailored than California's, specifying different penalties depending on the type of violation, number of times the violation has occurred, and whether the violator is a natural person or corporation. For certain offenses—failure to comply with the duty to submit emission allowances and credits, violation of trading prohibitions, disclosure of certain auction-related information, and other specified matters—Ontario imposes a first-time minimum corporate penalty of $25,000 in Canadian dollars ("CAN $") and maximum penalty of CAN $6 million.[58] Ontario's penalty ranges for subsequent offenses of this type are higher.[59] For natural persons committing those same offenses, the first-time minimum penalty is CAN $5,000 and maximum penalty is CAN $ 4 million; subsequent offenses may incur higher penalties.[60] The Act also authorizes penalties, other than those above, of up to CAN $50,000 per day for a first conviction of an individual, CAN $250,000 for a corporation and up to CAN $100,000 per day for subsequent convictions of individuals and CAN $500,000 for corporations.[61] Courts may also impose fines and restitution beyond the statutory maxima in the event a violator reaps a financial benefit from violating the law.[62] Sanctions may include imprisonment, as an alternative to penalties, for certain convictions.[63] By comparison, ARB may seek to impose penalties of $75,000 per day (or up to one year of imprisonment) for intentional violations and less if based on negligence (maximum $25,000 per day or up to nine months of imprisonment) or strict liability (maximum $10,000 per day or up to six months of imprisonment).[64] California has no minimum

[53] Act § 57(1). The maximum administrative penalty is CAN $1 million. Act § 57(8). Ontario is currently developing regulations to implement this portion of the Act. *See* Act § 57(18).
[54] *See* 17 CCR § 96013; Health & Saf. Code §§ 38580, 42401 (civil penalty process); 42402 (same); 42402.1 (same); 42402.2 (same); 42402.3 (same); 42410 (administrative law judge process).
[55] *See* Act §§ 22.3 (authority to impose restrictions and requirements on registered participant's accounts); 25 (authority to automatically suspend accounts).
[56] *See* 17 CCR §§ 95921(g) (authority to place restrictions on covered entities); 96011 (authority to suspend, revoke, or modify).
[57] *Compare* 17 CCR § 95857(b)(2) *with* Act § 14(7).
[58] Act § 51(1); 17 CCR § 95834.
[59] Act §§ 51(3), 51(4).
[60] *Id.*
[61] Act §§ 51(3), 51(5).
[62] Act §§ 51(6), 54(1).
[63] Act §§ 51(4), 51(5).
[64] Health & Saf. Code § 42402 et seq.

penalty. In both Ontario and California, counsel representing each jurisdiction's Attorney General makes the decision whether to proceed with charges that have been investigated and laid out by the respective regulators.

Ontario also has the discretion to seek criminal enforcement of statutes under applicable federal laws. These laws include Canada's Competition Act (1985)[65]—section 52 applies to fraud—and Canada's Criminal Code (1985).

Lastly, Ontario and California's legal frameworks each have provisions to facilitate enforcement of their respective laws. These provisions allow regulators in each jurisdiction to, among other things, gather information from the natural persons required to register to participate in their trading programs and provide bid guarantees.[66]

D. *Linkage does not impose liability on California.*

The fourth finding required by Government Code section 12894 subd. (f) is that:

> *(4) The proposed linkage and any related participation of the State of California in Western Climate Initiative, Incorporated, shall not impose any significant liability on the state or any state agency for any failure associated with the linkage.*

Government Code section 12894 subdivision (e) defines "linkage" as "an action taken by the State Air Resource Board or any other state agency that will result in" California accepting "compliance instruments issued by any other governmental agency . . .".

Here, ARB proposes to adopt Cap-and-Trade regulation amendments that would allow California to accept compliance instruments issued by Ontario.[67] As was the case with the Québec linkage, the proposed regulation linking California and Ontario does not reveal any provision that imposes any significant liability, or indeed any liability, on California or any state agency. With regard to adopting the regulation amendments, California is not liable for "adopting or failing to adopt an enactment or by failing to enforce any law," or for actions related to the emissions market such as suspending or revoking privileges.[68]

California's "related participation" in WCI, Inc. does not impose any significant liability. As described above (see footnote 8), the WCI Partner jurisdictions—which include California, Québec, and Ontario—formed WCI, Inc. in 2011 as a non-profit corporation to provide administrative and technical support to state and provincial greenhouse gas emissions trading programs. California's participation in WCI, Inc. allows ARB access to administrative support that WCI, Inc. is providing, including:

---

[65] Canada Competition Act (1985) Competition Act, R.S.C., 1985, c. C-34. http://lawslois.justice.gc.ca/PDF/C-34.pdf
[66] Act § 42.
[67] See proposed 17 CCR § 95943 et seq. ("Subarticle 12: Linkage to External Greenhouse Gas Emissions Trading Systems") at https://www.arb.ca.gov/regact/2016/capandtrade16/appa.pdf.
[68] Gov. Code §§ 818.2, 818.4.

(a) developing, implementing, and maintaining a system for tracking compliance instruments for allowance trading programs;

(b) developing, implementing, and maintaining capability to execute allowance auction and reserve sales; and

(c) developing, implementing, and maintaining capability to conduct analysis in support of each jurisdiction's market monitoring.[69]

The benefits of participating in WCI, Inc. have included reduced administrative costs through cost sharing with other jurisdictions and enhanced security and effectiveness of program infrastructure across programs, including the tracking system, auction operation, and market monitoring. Additionally, California's EPA Secretary and ARB Board Chair sit on WCI, Inc.'s Board of Directors. California has enjoyed the benefits of participating in WCI, Inc. for several years, and the proposed linkage with Ontario will enhance those benefits by creating a larger market for WCI, Inc. services.

As was the case with the Québec linkage, moving certain activities from the State of California to WCI, Inc. may create a barrier to liability sought to be imposed onto California. To the extent participation in WCI, Inc. includes the appointment of directors, governing corporate law and WCI, Inc.'s corporate articles provide extensive protection for directors. WCI, Inc. has purchased insurance covering its directors. The law allows corporations to indemnify directors, officers, employees and agents for any good faith actions taken on the corporation's behalf.[70] WCI, Inc.'s articles of incorporation, sections 12 and 13, exonerate directors "to the fullest extent permitted" by law, and to indemnify directors and employees.[71]

Conclusion

The foregoing comparison of California and Ontario's emissions trading programs provides support for making the four findings. Because of the collaborative manner in which both programs were developed, California and Ontario have designed their programs to operate with equal rigor. Staff recommends that the Governor make the findings.

[69] By-Laws of Western Climate Initiative, Inc. 4 (2013).
[70] Delaware Code Title 8, section 145. See also Del. Code Ann. tit. 8, § 102(b)(7) [corporate articles can eliminate director liability for breaching a duty of care, unless in bad faith].
[71] WCI, Inc. Statement of Incorporation 4 (2011).