

AGENDA REPORT

Resolution: Approve “Seaport Air Quality 2020 and Beyond Plan – The Pathway to Zero Emissions”

(Engineering)

MEETING DATE: 5/23/2019

AMOUNT: Not applicable

SUBMITTED BY: Richard Sinkoff, Director of Environmental Programs & Planning

APPROVED BY: J. Christopher Lytle, Executive Director

ACTION TYPE: Resolution

EXECUTIVE SUMMARY

This resolution seeks approval of the Port of Oakland Seaport Air Quality 2020 and Beyond Plan which establishes the vision of a zero-emissions seaport as the Board’s long-term policy goal. Building on the foundation established by the Port of Oakland Maritime Air Quality Improvement Plan (MAQIP) approved by the Board in 2009, the Seaport Air Quality 2020 and Beyond Plan is a master plan that provides the planning and policy framework to guide programs and projects to reduce emissions of diesel particulate matter and greenhouse gases from seaport operations.

BACKGROUND

The Seaport Air Quality 2020 and Beyond Plan (Plan, or 2020 and Beyond Plan) provides the planning and policy framework for the Port of Oakland (Port) to continue its efforts to reduce emissions from seaport operations and improve air quality. Port staff developed the Plan with substantial stakeholder review and input, as described in this report.

At present, seaport operations rely primarily on equipment that burns diesel fuel. Diesel fuel combustion emits toxic air contaminants such as diesel particulate matter (DPM); exposure to toxic air contaminants increases cancer risk for people living and working nearby. Diesel equipment at the seaport is one of many sources of DPM emissions affecting West Oakland. Furthermore, fuel combustion generates greenhouse gas (GHG) emissions, which contribute to global climate change.

The vision of the 2020 and Beyond Plan is to guide the seaport to a zero-emissions future—a bold and transformative policy direction, which contributes to reducing adverse air quality-

related health impacts on the West Oakland community. Achieving a zero-emissions Seaport requires changes to equipment, infrastructure, fuels and operations. These changes are anticipated to take place over decades as technology develops and becomes commercially available. The transition to zero emissions will require substantial resource investments, stakeholder engagement, and workforce training. The Plan provides the stable policy framework for decision making and actions within a business setting of limited resources, rapid technological change and innovation, heightened stakeholder and regulatory scrutiny, and fierce market competition.

Relationship to Maritime Air Quality Improvement Plan (MAQIP)

The 2020 and Beyond Plan builds on the foundation established by the MAQIP, which the Board approved on April 7, 2009. The primary MAQIP goal is to reduce DPM emissions 85% by 2020 over the 2005 baseline year. The Seaport's most recent emissions inventory (for calendar year 2017) shows that DPM emissions have declined by 81% since 2005. The 2020 and Beyond Plan extends the planning horizon for the Seaport's air quality improvement efforts beyond 2020 to the years 2030 and 2050. The Plan expands the scope of the Port's air quality efforts to address global climate change by reducing greenhouse gases while continuing to reduce criteria pollutants and DPM.

Regulatory Setting

Since the Board approved MAQIP in 2009, the regulatory, environmental, and funding setting affecting the Port's air quality efforts has changed. The primary change has been to broaden the air quality focus to include greenhouse gases and reduce local exposure to toxic air contaminants, thereby reducing adverse health impacts on residents.

The Port developed the MAQIP to address, among other matters, compliance with diesel regulations promulgated by the California Air Resources Board (CARB) for mobile sources at California seaports including shore power for ships at berth, drayage trucks, cargo handling equipment, harbor craft, and locomotives. The Port uses emission inventories to track progress towards the MAQIP's goals; the Port prepared inventories for 2005, 2012, 2015, and 2017.

The State of California (State) has moved aggressively to reduce GHG emissions. Assembly Bill 32 required CARB to develop a scoping plan to reduce GHG emissions to 1990 levels by 2020. Executive Order B-30-15 mandates a 40% reduction in GHG below 1990 levels by 2030. Executive Order B-48-18 accelerates the increase in zero-emissions vehicles to five million by 2030 along with sufficient charging infrastructure to support the electric vehicles. In a related effort, the Sustainable Freight Action Plan focuses State resources on the transition to zero-emissions transportation technology. Senate Bill 100 requires California grid electricity to be 60% renewable by 2030 and 100% carbon free by 2045. The Ports of Los Angeles and Long Beach released a 2017 update to their joint Clean Air Action Plan, establishing goals of 100% zero-emissions cargo-handling equipment by 2030 and 100% zero-emissions trucks by 2035. These Executive Orders, laws, regulations, and plans point to a future of zero-emissions technologies powered primarily by renewable electricity and other clean energy sources.

Air Quality in West Oakland

In 2008, CARB conducted a Human Health Risk Assessment (HRA) to evaluate the health impacts of emissions in West Oakland. According to CARB's 2008 HRA, the total modeled cancer risk from DPM in West Oakland was 1,180 in one million; the Port's contribution to modeled risk from DPM was 190 in one million, or 16%, using exposure assumptions as of 2008.

In 2018, CARB designated West Oakland as a "priority community" under Assembly Bill 617 (AB617) to develop a Community Air Action Plan. The Bay Area Air Quality Management District (BAAQMD) is partnering with the West Oakland Environmental Indicators Project (WOEIP), a local community-based organization, to develop the West Oakland Community Air Action Plan. The Community Air Action Plan is expected to include strategies and specific initiatives from both the 2020 and Beyond Plan as well as from the West Oakland Truck Management Plan (2019), a concurrent joint planning effort by the Port and the City of Oakland.

As part of the AB617 process, in 2019, BAAQMD conducted an HRA based on regional and local-scale U.S. Environmental Protection Agency models. The 2019 HRA included emissions from stationary and mobile sources (including data from the Port's 2017 emissions inventory), meteorological data and other required model inputs. BAAQMD presented the 2019 HRA modeling results to the AB617 Steering Committee on March 6, 2019, and to Port staff on March 13, 2019.

Direct comparison of the 2008 CARB and 2019 BAAQMD HRAs is problematic due to changed assumptions in exposure and the population distribution in West Oakland. However, Port staff reviewed the population-weighted average concentrations of DPM in ambient air and calculated a 92% reduction in local health risk impacts due to all modeled local sources of DPM between 2008 HRA and the 2019 HRA.

Table 1, below, summarizes the contribution to the population-weighted average DPM concentration, particulate matter less than 2.5 microns in diameter (PM_{2.5}) concentration, and cancer risk from Port sources and non-Port trucks. The domain for trucks in both categories, drayage trucks serving the Port and non-Port trucks, includes local streets and highways.

Table 1: Contribution of Port Sources and Non-Port Trucks to Population-Weighted Average Concentrations and Cancer Risk

Source	Share of Diesel PM	Share of PM _{2.5}	Share of Cancer Risk
Ocean Going Vessels (maneuvering)	5%	1%	6%
Ocean Going Vessels (berthing)	8%	2%	9%
Harbor Craft	10%	2%	12%
Cargo Handling Equipment	2%	0%	2%
Drayage Trucks Serving Port	2%	1%	2%
Port Total	27%	6%	31%
Non-Port Trucks	45%	11%	25%
Other Sources ¹	28%	83%	44%

Source: Port of Oakland, based on slides 16-18 of BAAQMD presentation to AB617 Steering Committee on 3/6/19

The BAAQMD 2019 HRA substantiates the progress in reducing emissions from drayage trucks serving the Port and from cargo handling equipment. Table 1 shows that drayage trucks serving the Port contribute about 2% of the population-weighted exposure, compared to 25% from non-Port trucks. As trucks serving the Port and cargo handling equipment have become cleaner, marine sources, such as ships and harbor craft (tug boats and ferries), become a focus for continued emissions reductions.

2020 AND BEYOND PLAN

The planning process for the 2020 and Beyond Plan comprises two distinct activities: 1) Plan development; and 2) Plan implementation.

Plan development involved creation of the Plan itself, including planning analyses, baseline technical studies, and review of regulations, policies, technologies, and business conditions. Broad stakeholder engagement was critical during Plan development, relying on review and input from a diverse Task Force that included regulatory agencies, community-based organizations, Port tenants and business partners, labor organizations, and residents. To ensure a representative engagement process, the Task Force was co-chaired by individuals representing the Port, the Port business community, community-based organizations, and regulatory agencies. The Co-Chairs set the agenda for each Task Force meeting.

Plan implementation will occur in phases with a focus on the 5-year period from 2019 to 2023 (Near-Term Phase). On-going stakeholder engagement through the Task Force and Workforce Development Plan will be key components during Plan implementation. The Port will monitor progress and prepare annual progress reports and a Plan Update in 2023 to stay current and course-correct, as needed. For more detail see Plan Update section of this report below.

¹ Other sources contributing to DPM concentrations and cancer risk include road dust, non-Port rail (Amtrak and Union Pacific Railroad), ferries, local recyclers, local distributors, scrap handlers, gas stations, wastewater treatment facility, Schnitzer Steel, and others.

Plan Development: Framework

The key 2020 and Beyond Plan framework elements are its vision, goals, and strategies.

The Vision of the 2020 and Beyond Plan is the pathway to zero-emissions seaport operations through changes in equipment, infrastructure, fuels, and operations.

The Plan has five goals:

- Goal #1: Keep the Port competitive and financially sustainable, and ensure that the Port remains a catalyst for jobs and economic development.
- Goal #2: Minimize emissions of criteria air pollutants and toxic air contaminants, with a focus on reducing DPM emissions, thereby reducing community exposure to pollutants that are harmful to public health.
- Goal #3: Reduce GHG emissions.
- Goal #4: Build and strengthen partnerships among the Port, Port tenants, equipment manufacturers, equipment owners and operators, community organizations, regulatory agencies, and the public.
- Goal #5: Provide opportunities for meaningful stakeholder engagement.

The Plan strategies are:

- Strategy #1: Continue Emissions Reduction Programs and Projects.
- Strategy #2: Promote the Pathway to Zero-Emissions Equipment and Operations.
- Strategy #3: Develop Required Infrastructure to Support the Pathway to Zero Emissions.
- Strategy #4: Build and Strengthen Partnerships.
- Strategy #5: Engage Stakeholders.
- Strategy #6: Pursue External Funding.

Plan Development Milestones

The Plan is the culmination of two years of effort by Port staff and stakeholders, with substantial review and input from regulatory agencies, community-based organizations, residents, labor organizations, non-governmental organizations, Port business partners, and trade organizations. Table 2: *Milestones of Plan Development*, presents the major milestones of the Plan development phase. Developing the Plan involved six Task Force meetings, a Draft Plan, a Revised Draft Plan, two separate public comment periods, and four status updates to the Board (i.e., three written reports and one oral update.)

Table 2: Milestones of Plan Development

Date	Event	Description
Dec. 14, 2017	Written Status Report to Board	Port Staff updated the Board on MAQIP implementation and sought direction for creating an update to the Plan.
Dec. 2017 to Jan. 2018	Interviews with MAQIP Task Force members	Stakeholder assessment for reconvening of MAQIP Task Force for Plan update.
Feb. 23, 2018	Task Force Meeting #1	This meeting focused on technical studies pertaining to the MAQIP, including the status of emissions reductions.
March 8, 2018	Approval of the Port of Oakland Strategic Business Plan for 2018-2022	The Port renewed its commitment to improving air quality and committed to update MAQIP beyond year 2020.
April 12, 2018	Written Status Report to Board	Port Staff updated the Board on MAQIP progress and development of the 2020 and Beyond Plan.
May 9, 2018	Task Force Meeting #2	The Port provided a MAQIP update and the Task Force pivoted to its new focus on the 2020 and Beyond Plan.
June 21, 2018	Task Force Meeting #3	The Port presented an overview of the Draft Plan, with a focus on policy issues and the Port's proposed approach to these issues.
June 29, 2018	Draft Plan released	Draft Plan released to public for review and comment.
June 29, 2018 to Aug. 31, 2018	Public comment period #1	9-week comment period: 11 letters, 4 e-mails, 3 phone calls, 1 newsletter, and comments from Task Force Meeting #3, for a total of 347 individual comments.
July 12, 2018	Written Status Report to Board	Port Staff gave the Board an update on progress of Plan development.
Sept. 26, 2018	Task Force Meeting #4	The Port presented a summary of the comments received on the Draft Plan, proposed revisions, and the schedule for the release of the Revised Draft, and held roundtable discussions pertaining to the Plan.
Dec. 14, 2018	Revised Draft Plan released	The Port released the Revised Draft Plan for review in response to requests from stakeholders for an opportunity to review new appendices and revisions to the Plan based upon prior comments.
Dec. 14, 2018 to Jan. 24, 2019	Public comment period #2	5-week comment period, extended an additional 6 th week per stakeholder request: 6 letters, 2 e-mails and comment cards from Task Force Meeting #4 for a total of 220 individual comments.
Jan. 10, 2019	Task Force Meeting #5	The Port presented an overview of the Revised Draft Plan, provided an opportunity for stakeholders to discuss, and accepted written comments.

Jan. 24, 2019	Oral remarks to the Board	Port Staff gave the Board an oral update on progress of Plan development as part of approval of MOU with the Port of Long Beach for ZANZEFF ² grant
April 23, 2019	Task Force Meeting #6	Port staff presented the proposed Final Plan which is subject to Board approval.

Document Structure

The Plan comprises two volumes. Volume I is the main Plan text. It includes seven appendices, which provide the factual details and technical studies to support the Plan’s actions and goals. Volume II, Response to Comments, is a comprehensive compilation of the comments received on both the Draft Plan and Revised Draft Plan. Comments were categorized into master response topics. The Response to Comments document indicates how each comment informed Plan content so that commenters can understand the reasoning supporting Plan changes, where applicable.

A copy of the proposed final Seaport Air Quality 2020 and Beyond Plan is on the Port's web site: <https://www.portoakland.com/community/environmental-stewardship/maritime-air-quality-improvement-plan/>.

Plan Implementation

Phases

The 2020 and Beyond Plan is framed within the State’s 2030 and 2050 GHG reduction goals. Because these planning horizons are decades away, the Plan structures its actions into three phases: Near-Term (2019-2023); Intermediate-Term (2023-2030); and Long-Term (2030-2050).

Near-Term Action Plan (2019-2023)

To move diligently and respond in a timely way to regulatory and community concerns and to grant, incentive, and other funding opportunities in an environmental of rapid technological change, the 2020 and Beyond Plan focuses on actions over the next five years. The Plan achieves its goals by pursuing strategies supported by specific time-bound, measurable actions, called “implementing actions.”

Each implementing action falls into one of seven categories: infrastructure, equipment, fuels, operations, partnerships, stakeholder engagement, and funding. The implementing actions projected for the next five years are compiled into the Near-Term Action Plan (NTAP). Near-term implementing actions include existing MAQIP programs as well as other actions identified during Plan development with input from stakeholders. Some of the implementing actions already underway are summarized in Table 3.

² Zero- and Near-Zero Emission Freight Facilities Project administered by CARB

Table 3: Implementing Actions Already Underway

<p>Infrastructure & Equipment</p> <ul style="list-style-type: none"> • Conduct Maritime Power Capacity Study for Terminal Electrification • Continue ZANZEFF grant components: <ul style="list-style-type: none"> ○ Support demonstration of 10 electric drayage trucks at Shippers Transport Express; ○ Install electrical charging infrastructure at Shippers Transport Express; and ○ Support five electric yard tractors and one electric top handler at the Matson Terminal. • Monitor conversion of rubber-tired gantry cranes from diesel to hybrid at the Oakland International Container Terminal
<p>Fuels</p> <ul style="list-style-type: none"> • Investigate use of ultra-low sulfur fuel for ocean-going vessels • Investigate use of renewable diesel in Port-owned diesel-powered vehicles
<p>Operations</p> <ul style="list-style-type: none"> • Track vessel shore power use • Meet with Port tenants to discuss current air quality measures and opportunities for improvement, such as electric equipment
<p>Funding</p> <ul style="list-style-type: none"> • Participate in CARB’s Low Carbon Fuel Standard program (LCFS). The Port can earn credits from providing electricity for shore power and subsequently sell those credits in the LCFS market. Money earned in the program must be spent making the transportation system less carbon intensive, and can be used to support more electrification
<p>Stakeholder Engagement</p> <ul style="list-style-type: none"> • Continue using Co-Chairs and Task Force meetings for collaborative problem-solving, sharing information, providing updates, and receiving input from stakeholders
<p>Partnerships</p> <ul style="list-style-type: none"> • Work with Port of Long Beach to deliver Port’s component of the ZANZEFF grant • Continue holding weekly Environmental Office Hours to connect truck drivers with grants and incentives for zero-emissions vehicles • Continue participating on the AB617 Steering Committee

Intermediate-Term (2023-2030): Equipment and Infrastructure Goals

The Plan includes three equipment and infrastructure goals that occur before 2030, based on results of the equipment technology feasibility analysis (Appendix F).

- By 2025, deploy at least 44 pieces of zero-emissions cargo handling equipment at the Port.
- By 2027, deploy at least 21 zero-emission drayage trucks in short-haul service at the Port.
- Install electric infrastructure to support these zero-emissions equipment deployments, above.

Screening and Evaluation of Implementing Actions

The Plan includes an on-going process to identify, screen, and evaluate implementing actions. The Port will provide documentation of the screening and evaluation process to the Task Force Co-Chairs for their review and feedback. This will be a key opportunity for stakeholder engagement. Where needed or desired, the Co-Chairs will convene Working Sessions for collaborative problem solving on specified actions. The Co-Chairs will present the results of the process to the Task Force for its review and feedback.

Monitoring and reporting

- Port staff plans to present an Annual Progress Report to the Board at a regular, public Board meeting.
- The Task Force plans to meet approximately every six months for updates on the progress of the Plan.
- Co-Chairs will convene as needed for continued feedback and input.
- The Plan provides for periodic seaport emissions inventory (EI) updates. The next EI update is scheduled for 2020.

Plan Update

The Plan is envisioned as a “living” document to be amended over time in response to the results of implementing actions and to reflect changes in the regulatory, economic, and technological context of maritime operations. The Port will prepare a Plan Update in five years to coincide with the end of the Near-Term Action Plan in 2023. Consistent with MAQIP Supplement No.1 (approved by the Board April 7, 2009), if the Plan Update results in a change in policy direction, it would be subject to Board consideration and approval. Changes such as revisions to actions in the Near-Term Action Plan would not require Board approval and would be presented in the appropriate Annual Progress Report.

Workforce Development

The Plan includes a Workforce Development Plan (Appendix E), which positions the Port to expand on its years of community and education commitment to identify, analyze, and assess potential workforce needs in collaboration with community stakeholders, including training partners and industry leaders. The Workforce Development Plan is complementary to the Port's larger Port-wide workforce development effort.

Stakeholder Engagement

The Port developed a specific Public Engagement Plan (PEP) for the 2020 and Beyond Plan to involve stakeholders and the public. The PEP is included in the Plan as Appendix G.

Development of the 2020 and Beyond Plan involved substantial stakeholder engagement. Stakeholder engagement will continue during Plan implementation in the form of at least two Task Force meetings annually, additional Working Sessions (see Screening and Evaluation of Implementing Actions, above) as recommended by the Co-Chairs, and input received from community forums. The PEP recommendations will enhance the Port's engagement and collaborative problem-solving process with local community and neighborhood groups, community-based organizations, Port-related business interests and tenants, and regulatory agencies.

At the final Plan Development Task Force meeting (Task Force Meeting #6 on April 23, 2019), the Co-Chairs requested an additional opportunity to review the draft final screening and evaluation criteria. To be responsive to this request, the Port circulated the draft final screening and evaluation criteria to the Co-Chairs who provided feedback on the criteria related to community health risk and reduction of exposure to pollutants harmful to public health. The Port responded to the additional Co-Chairs' feedback by incorporating two substantive revisions into the screening and evaluation criteria – 1) a revised screening criterion that incorporates reducing community health risk and 2) a new exposure reduction feasibility criterion. Port staff anticipate that other suggestions made through the Co-Chairs will be the subject of future Co-Chair meetings during implementation.

BUDGET & STAFFING

Budget:

Funding of Port-sponsored programs and projects under the Plan will be determined on a project-by-project basis. Funding sources will likely include grants and other external funding sources, as well as internal Port resources. Port tenants, customers, and maritime-related businesses will also likely invest in new equipment, and modify operations pursuant to their own business strategies and operational needs.

Staffing:

The Port's Environmental Programs and Planning (EP&P) division will lead Plan project management and implementation coordination. The Social Responsibility Division (SRD) will manage stakeholder outreach, engagement, and workforce development. SRD will convene

Co-Chairs and Task Force meetings and manage public engagement and workforce activities pursuant to the Workforce Development Plan and the PEP.

Plan implementation will require extensive coordination between EP&P and other Port departments. To supplement Port staff resources, the Port anticipates retaining specialized technical consultants to conduct stakeholder engagement, pursue grants and incentive funding, perform technology feasibility studies, screen and evaluate suggested implementing actions, and perform engineering studies and design, on an as-needed basis.

The Near-Term Action Plan is tailored to reflect available capacity of Port resources. As implementation of the Plan progresses, the Port will continuously assess resource needs and capacity.

Port management will review budget, staffing, technical expertise, and resources needs as part of the annual fiscal year budget preparation. Port staff will identify opportunities for grants, incentive funding and coordination on technical studies and research with agency partners such as the BAAQMD, Alameda County Departments of Public Health and Environmental Health, CARB, U.S. Environmental Protection Agency, and the City of Oakland. The Port relies on regulatory and public health agencies to perform health risk assessments.

MARITIME AVIATION PROJECT LABOR AGREEMENT (MAPLA)

The matters included in this Agenda Report do not fall within the scope of the Port of Oakland Maritime and Aviation Project Labor Agreement and the provisions of the MAPLA do not apply.

STRATEGIC PLAN

The action described herein would help the Port achieve the following goals and objectives in the Port's Strategic Business Plan (2018-2022).

<https://www.portofoakland.com/wp-content/uploads/Port-of-Oakland-Strategic-Plan.pdf>

- Goal: Care for Our Environment
 - Objective: Develop an updated MAQIP beyond 2020.

LIVING WAGE

Living wage requirements, in accordance with the Port's Rules and Regulations for the Implementation and Enforcement of the Port of Oakland Living Wage Requirements (the "Living Wage Regulations"), do not apply because the requested action is not an agreement, contract, lease, or request to provide financial assistance within the meaning of the Living Wage Regulations.

SUSTAINABILITY

Port staff have reviewed the Port's Sustainability Policy (2000). The 2020 and Beyond Plan supports the Sustainability Policy, particularly the Air Quality and Alternative Fuel Equipment categories. For example, two of the five stated goals of the Plan are to reduce harmful emissions (DPM and GHG). Additionally, the Plan promotes the transition from diesel fuel to cleaner electricity for cargo handling equipment and trucks.

Individual development projects undertaken as part of the Plan will complete the Sustainability Opportunities Assessment Form, as appropriate.

ENVIRONMENTAL

CEQA Determination:

Approval of the Seaport Air Quality 2020 and Beyond Plan was reviewed in accordance with the requirements of the California Environmental Quality Act (CEQA) and the Port CEQA Guidelines. The proposed action is statutorily exempt from CEQA under Section 15262 of CEQA, which states "a project involving only feasibility or planning studies for possible future actions, which the agency, board or commission has not approved, adopted or funded, does not require the preparation of an Environmental Impact Report or negative declaration but does require consideration of environmental factors." The purpose of the Seaport Air Quality 2020 and Beyond Plan is to propose strategies to reduce air pollution from maritime activities, and thus would have a beneficial impact on air quality and on the environment. No further CEQA review is required for approval of the Seaport Air Quality 2020 and Beyond Plan.

In the future, when specific activities are proposed to implement the air quality strategies identified in the Plan, Port staff will determine whether environmental review is required under CEQA, and will bring the specific programs and projects to the Board for findings under CEQA, as needed.

GENERAL PLAN

This action does not change the use of any existing facility, make alterations to an existing facility, or create a new facility. Therefore, a General Plan conformity determination pursuant to Section 727 of the City of Oakland Charter is not required.

OWNER-CONTROLLED INSURANCE PROGRAM (OCIP)

This action is not subject to the Port's Owner Controlled Insurance Program as it is not a capital improvement construction project.

OPTIONS

1. Approve the Seaport Air Quality 2020 and Beyond Plan. This would establish the Seaport Air Quality 2020 and Beyond Plan as the master plan to guide Port maritime air quality policy, programs, and projects to support the pathway to a zero-emissions seaport. It would provide the Port a stable framework for decision making and to take specific actions, which support the zero-emissions Seaport vision. This is the recommended option.
2. Do not approve the Seaport Air Quality 2020 and Beyond Plan. Under this option, Port staff would receive comments and feedback from the Board and return to the Board at a future date per their direction.

RECOMMENDATION

Adopt a resolution approving the “Seaport Air Quality 2020 and Beyond Plan – The Pathway to Zero Emissions.”