Decarbonization Target-Setting Action Playbook

Honda Green Excellence Academy

TRIO™ | HONDA

Introduction

Honda is requiring all Direct Tier 1 Automotive and Raw Materials suppliers to reduce greenhouse gas emissions by 5.7% annually beginning in 2025. This means that suppliers will need to emit 5.7% fewer emissions in 2025 than in 2019 for all operations that support Honda business lines. Suppliers will also need to reduce 5.7% of 2019 emissions totals each subsequent year.

In addition, Honda is also requiring suppliers to set internal targets to reduce carbon emissions in alignment with the 5.7% annual reduction. This exercise of setting a target will ensure that company leaders are aware of the requirement and supportive of focusing resources toward achieving it.

Outcomes

This Decarbonization Target-Setting Action Playbook (referred to in this document as “the Playbook”) has been developed to help Honda’s suppliers create a decarbonization strategy that achieves Honda’s decarbonization requirements and provides decision useful information on the business and financial implications of executing that decarbonization strategy.

Equipped with this information, it is our goal that Honda’s suppliers will be able to set decarbonization targets, which will help secure the resources needed to meet those targets.

Checklist

This checklist is divided into the following sections to help guide you through the overall process for setting a target:

01 Create your Project Team

Roles: The Project Lead will be primarily responsible for creating a Project Team and coordinating team meetings. The Project Team must also be available to attend and contribute to meetings

01.01 Select a Project Lead and learn the project requirements

- ☐ Designate a Project Lead

- ☐ The Project Lead should download and review Honda's Supplier Sustainability Requirements letter and Honda's Supplier Sustainability Excellence Framework (referring especially to the Supplier Scoring on pages 16 and 17). Collectively, these two documents will be referred to as the "Honda Business Case" in this document.

- ☐ The Project Lead should also download and review the Honda Decarbonization Target-Setting Tool (referred to in this document as "the Target-Setting Tool") to understand the key pieces of information this process will require and what the tools from Trio will provide

Note: Key information that will be needed from your company include:

- Greenhouse Gas (GHG) inventory data (from M2030)
- Fuel and energy consumption data (from M2030)

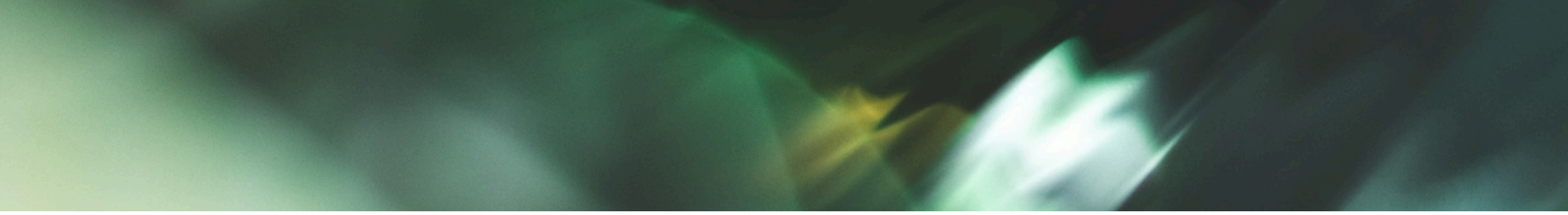
Note: Key information that the Target-Setting Tool will provide include:

- The key project types (energy efficiency, onsite solar, etc.) that could be used by your company to reduce carbon emissions
- The expected financial requirements to complete those projects

01.02 Create a Project Team

☐ Based on the information learned in 01.01, the Project Lead should create a Project Team of key stakeholders who will contribute to target approval

Note: Key stakeholders often include Chief Executive Officers/Presidents and key leaders from Finance, Sustainability, Operations, and Facilities



02 Understand key priorities for leadership

Roles: The Project Lead will be primarily responsible for preparing and educating leadership. The Project Team should understand their expected roles and information they will need to provide for the upcoming requirements of this Action

02.01 Do your homework on your company's sustainability strategy

- ☐ Learn whether your company (or a parent company, if applicable) has already set a decarbonization target. If you have, does it meet Honda's annual 5.7% reduction requirement?

Note: This may involve reading your company's sustainability report, or this may involve asking key stakeholders in your company such as sustainability, environmental, or communications leaders

- ☐ Learn your company's sustainability priorities, and learn who drives those priorities (do investors, customers, parent company, etc. drive priorities?)

Note: You can use this information to communicate how setting a decarbonization target supports these priorities and supports the requests of these key stakeholders

02.02 Communicate with leadership

Note: The following steps may be accomplished in whatever forum works best for your team. This may be a single meeting with leadership to set expectations, a series of meetings, or targeted email communication. No matter how you gather this information, document key learnings and the needs of leadership to approve a decarbonization target

- ☐ Educate leadership on greenhouse gas emissions and target setting (if needed)
- ☐ Review the Honda Business Case (Honda's Supplier Sustainability Requirements letter and Honda's Supplier Sustainability Excellence Framework)
- ☐ Learn what data leadership will need to feel comfortable approving a target (examples might include total expected capital outlay, impact to annual expense, return on investment, risk, etc.)
- ☐ Learn key barriers to setting a decarbonization target in line with Honda's requirements
- ☐ Define roles and responsibilities for creating the decarbonization strategy
- ☐ Review the expected timeline to model the decarbonization strategy

Note: Sections 3 and 4 of this Playbook will likely take between 1 and 3 months to complete depending on data availability

- ☐ Schedule time to discuss and approve a decarbonization strategy aligned with Honda's requirements

03 Create your decarbonization strategy

Roles: The Project Lead will be primarily responsible for completing the Target-Setting Tool with the help of any Project Team members who enter data into M2030 and Project Team members who manage data on your company's facilities such as square footage and types of equipment used.

03.01 Step 1: Enter company info and the most recent year of data

- ☐ Open the Target-Setting Tool and review the "Instructions" tab. Input your Company Name, 6-Digit Honda Supplier Number, and Project Lead contact information

- ☐ Navigate to the "1. Emissions Forecast" tab and input the year which is your Most Recent Year of Data

Note: The Most Recent Year of Data should be the most recent year you have data completed in M2030 (the most recent year that has a green check mark on the left of the Measurements tab in M2030)
Note: The Base Year is set to 2019 to align with Honda's goals

03.02 Step 2: Enter base year and most recent year emissions data for all facilities that allocate emissions to Honda

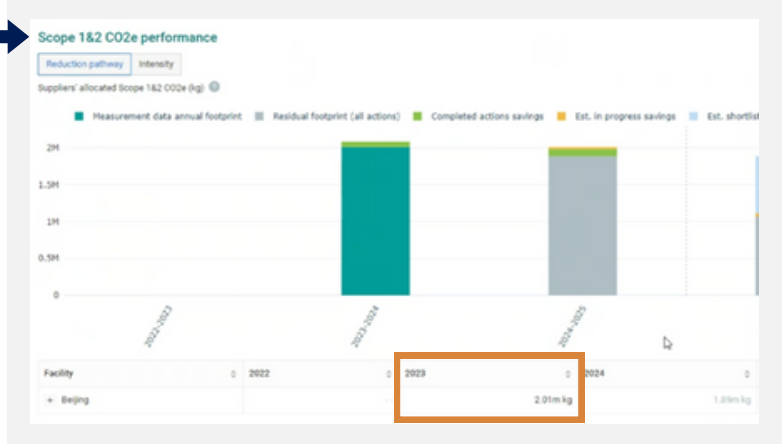
- ☐ Find your emissions data by logging into M2030, navigating to the **Reports** tab, and selecting the **CO2e & resource intensity report**

- ☐ Select the appropriate **Organization level** to find the emissions for Honda facilities and ensure that **Scope 1&2 CO2e** is the selected metric

Note: If the facilities which supply to Honda are not neatly under a single organization group or if there are facilities that don't supply to Honda in a group, then you will need to pick the facilities that supply to Honda one-by-one and sum up their emissions for entry into the Target-Setting Tool

☐ Scroll down to the **Scope 1&2 CO2e performance** table. Look to the table below the graph and find the Scope 1&2 emissions for 2019. Enter this into the **2019 Emissions (Base Year)** table in the Excel tool. Do the same for the **Most Recent Year Emissions** table

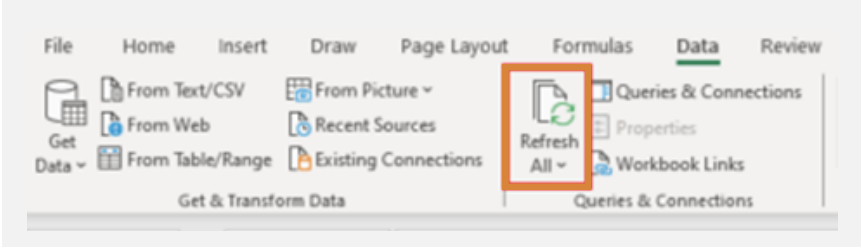
Note: If 2019 data isn't available (like in the screenshot below), enter in the **next available year** in the entry for 2019. In the screenshot below, it is the 2023 data



2019 Emissions (Base Year)	
Total Scope 1&2 Emissions (kg)	2,010,000

Most Recent Year Emissions	
Year	2023
Total Scope 1&2 Emissions (kg)	2,010,000

☐ Complete a data refresh to enable the entered emissions data to populate the Target-Setting Tool graphs and charts properly. Navigate to the **Data** tab at the top of your Excel screen and click **Refresh All**:

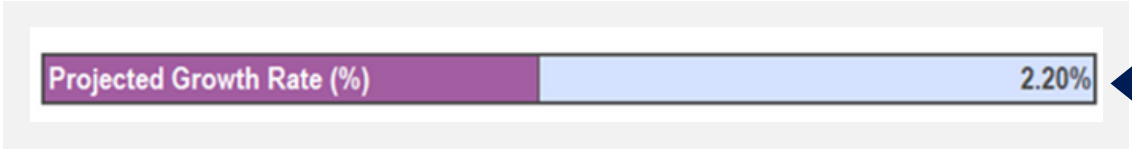


03.03 Step 3: Enter your projected emissions growth rate

- ☐ Estimate the percentage you expect your emissions to grow annually. We recommend using either of the following values as a proxy estimate of emissions growth:
  - Expected annual production volume growth
  - Expected annual revenue growth

Note: Your growth rate can be negative if you are projecting volume or revenue decrease
Note: The growth rate should be estimated **without** factoring in projects or efforts to decrease emissions

- ☐ Enter the expected annual growth rate of your carbon emissions in the Projected Growth Rate (%) table in Step 3 of the Target-Setting Tool



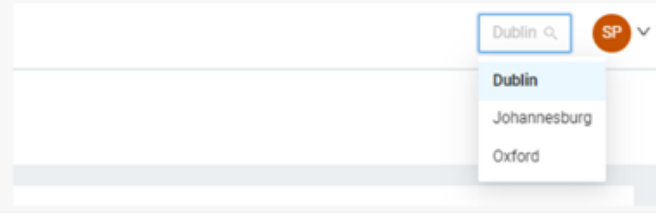
03.04 Step 4: Enter facility level data

- ☐ Find your facility data by navigating to the Measurements tab in M2030 and select your Most Recent Emissions Year (on the left)
- ☐ In the top right, select a specific site that supplies to Honda
- ☐ Navigate to the "2. Facility Emissions" tab in the Target-Setting Tool to enter this data
- ☐ Using the data entry tables in the Target-Setting Tool as a guide, enter the data from the M2030 Energy and Scope 1&2 CO2e tables into the Target-Setting Tool tables for the Total Value and Unit of each emission source

  Note: Enter 0 for any emission source that isn't in M2030 for your facility

  Note: Be sure to select the country each site is located in via the drop-down underneath site name for each table

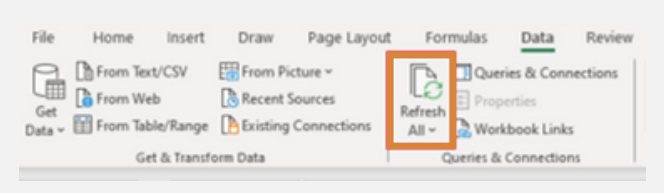
- ☐ Repeat the steps 03.04 to enter data for all of your facilities in M2030 that supply to Honda



Site #6 Name (if available): Dublin
Country: United States of America

Site Name	Emissions Source	Unit	Total Values
Dublin	Electricity (renewable purchased)	kWh	0
Dublin	Electricity (standard)	kWh	0
Dublin	Coking Coal	MT	0
Dublin	Kerosene	Gallon	0
Dublin	Diesel Oil	Gallon	0
Dublin	Petrol/Gasoline	Gallon	0
Dublin	Natural Gas	therm	0
Dublin	Natural Gas Liquids (NGLs)	Gallon	0
Dublin	Liquified petroleum gases	Gallon	0
Dublin	Crude Oil	mmBtu	0
Dublin	Residual Fuel Oil	mmBtu	0
Dublin	Shale Oil	Gallon	0
Dublin	Anthracite	MT	0
Dublin	Bitumen (Orimulsion)	MT	0
Dublin	Brown Coal (Lignite)	MT	0
Dublin	Sub-Bituminous coal	MT	0
Dublin	Petroleum coke	mmBtu	0
Dublin	*Purchased cooling*	*MTCO2e*	0
Dublin	*Purchased heat*	*MTCO2e*	0
Dublin	*Purchased steam*	*MTCO2e*	0
Dublin	*Refrigerant Leakage*	*MTCO2e*	0
Dublin	**Other process emissions*	*MTCO2e*	0

- [ ] Complete a data refresh to enable the entered emissions data to populate the provided graphs and charts on the “3. Decarbonization Strategy” tab properly. Navigate to the data tab at the top of your Excel screen and click Refresh All:



03.05 Step 5: Estimate energy efficiency opportunity

- [ ] Navigate to the “3. Decarbonization Strategy” tab in the Target-Setting Tool to select your decarbonization strategy

- [ ] Estimate the amount of electricity and fuel you expect to reduce due to energy efficiency improvements by 2035 and 2050. We offer the following as estimates:

Facility Age	2035 Efficiency Improvement	2050 Efficiency Improvement
Less than 5 years	0 - 10%	0 - 10%
5 – 10 years	5 - 15%	5 - 15%
10 – 20 years	10 - 20%	10 - 20%
Greater than 20 years	15+%	15+%

- [ ] Enter the expected energy efficiency improvement in the Energy Efficiency row for 2035 and 2050

Decarbonization Lever Bucket	2035	2050
Energy Efficiency	10%	20%

03.06 Step 6: Estimate coverage of electrification and fuel switching

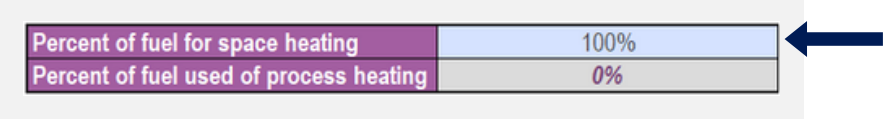
Note: Electrification involves the replacement of equipment that consumes fossil fuels with equipment that uses electricity. An example of this is switching out a natural gas boiler with an electric boiler

- ☐ Fuel switching involves replacing fossil fuels with biofuels. An example of this is using renewable biogas in your boiler in place of natural gas
- ☐ Enter the approximate percentages of your fuel used for space heating (HVAC) compared to fuel used for processes (ex. steam generation)

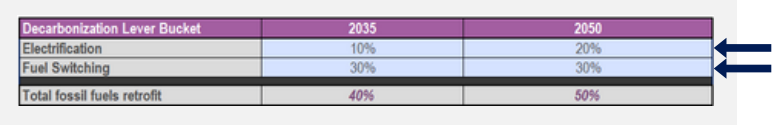
Note: If you don't know, consider your business operations. Do have many industrial processes such as smelting, metal forming, or glass manufacturing? If so, your process heat may be as high as 70% - 90%. If not, space heating will be a significantly higher percentage – up to 100%
Note: Enter your percentage into the **Percent of fuel for space heating row**. The other percentage will auto-populate

- ☐ Enter the percentage of fossil fuel equipment you expect to convert to electric equipment and the percentage you expect to switch to use of alternative fuels

Note: We recommend entering at least the full percentage you entered above in **space heating for electrification**. Consider either electrification and fuel switching to cover the remainder
Note: The **Total fossil fuels retrofit** is the sum of electrification and fuel switching. For each year (2035 and 2050) this should not be more than 100%



Percent of fuel for space heating	100%
Percent of fuel used of process heating	*0%*



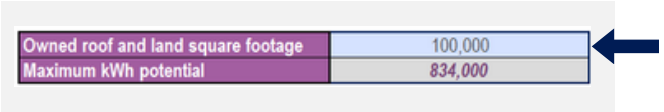
Decarbonization Lever Bucket	2035	2050
Electrification	10%	20%
Fuel Switching	30%	30%
Total fossil fuels retrofit	*40%*	*50%*

03.07 Step 7: Estimate the percentage of your electricity which will be renewable

- [ ] Estimate the amount of electricity you project could be covered by onsite solar sources

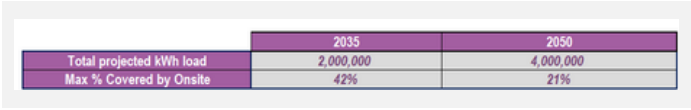
> Note: If you opt to leverage electrification in Step 6, this will increase your overall electricity load

- [ ] Enter the total roof and land square footage that you have available for onsite solar into the "Owned roof and land square footage" entry box. Note the following:
  - We recommend entering the roof and available land square footage for owned sites – do not include leased locations
  - The Maximum kWh potential will auto-populate. This is an approximation of the total annual kWh onsite solar could produce at your sites if you utilize the full square footage entered here



Owned roof and land square footage	100,000
Maximum kWh potential	834,000

- [ ] Looking at the next table, compare the Maximum kWh potential to your Total projected kWh load in 2035 and 2050. Note the following:
  - The Total projected kWh load in the table below is based on the projected % growth selected in step 03.03 and the percentage electrification selected in step 03.06
  - The Max % Covered by Onsite shown in the table below is the approximate portion of your projected load that could be covered if you deploy onsite across all of your owned roof and land space



	2035	2050
Total projected kWh load	2,000,000	4,000,000
Max % Covered by Onsite	42%	21%

☐ Using the **Max % Covered by Onsite** percentages as a guide, estimate the percentage of your electricity you plan to produce with onsite solar by 2035 and 2050 in the Onsite Solar row. Note the following:

- The percentages entered into the **Onsite Solar** row should not exceed the **Max % Covered by Onsite** percentages calculated in the table above
- Consider factors such as state regulations, facility electricity rates, and roof replacements to help estimate how much your maximum potential should be reduced
- It is possible that your **2050** percentage will be less than your **2035** percentage. This is because your **Total projected kWh load** in 2050 is likely to be higher than in 2035. Therefore, the maximum % of load that can be covered by onsite solar may be less, even if you are producing the same amount in 2050 as you are in 2035.
- If you do not intend to deploy onsite solar, you can enter 0% into 2035 and 2050

Decarbonization Lever Bucket	2035	2050
Onsite Solar	10%	15%

☐ Estimate the percentage of your electricity for which you plan to procure renewable energy using PPAs & VPPAs, Utility Programs, and RECs. Consider the following:

- PPAs (Power Purchase Agreements) and VPPAs (Virtual Power Purchase Agreements) are contracts to purchase energy from specific generation facilities such as a wind or solar farm
- Utility Programs are programs offered by local utilities which offer green power, which often offer Renewable Energy Certificates (RECs) to attribute the renewable energy claim to you
- RECs are Renewable Energy Certificates which can be purchased on an open REC market to attribute renewable energy claims to your company for the electricity you consume. 1 REC attributes renewable energy to 1 MWh of your electricity

Decarbonization Lever Bucket	2035	2050
PPAs & VPPAs	20%	30%
Utility Programs	10%	15%
RECs	15%	20%
Total Renewables	55%	80%

Note: The **Total Renewables** is a sum of all percent renewable entries, including onsite solar. This should not exceed 100%

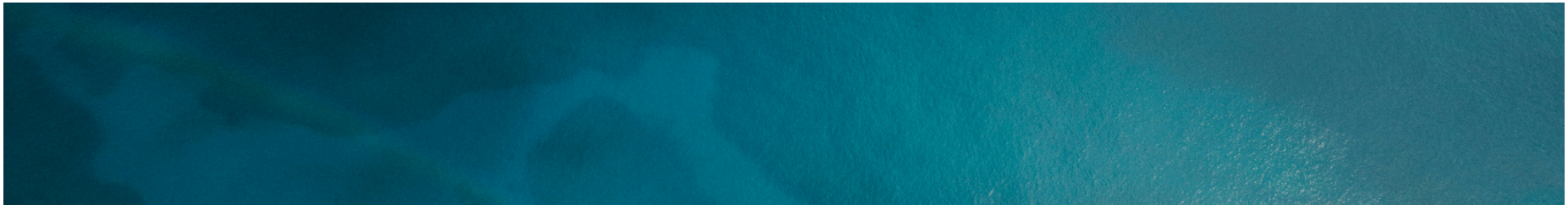
03.08 Step 8: Estimate refrigerant emissions reductions

- ☐ Estimate the refrigerant emissions you expect to reduce due to refrigerant emissions reduction initiatives by 2035 and 2050. Consider the following as estimated emissions reductions you can expect from common actions to reduce refrigerant emissions:

Reduction Initiative	2035 Estimated Emissions Reductions	2050 Estimated Emissions Reductions
Improve refrigerant leak rates	10 - 30%	10 - 30%
Replace with low Global Warming Potential (GWP) refrigerants	25 - 100%	25 - 100%

- ☐ Enter the expected energy efficiency improvement in the Refrigerant Emissions Reduction row for 2035 and 2050

Decarbonization Lever Bucket	2035	2050
Refrigerant Emissions Reduction	15%	25%



03.09 Step 9: Estimate process emissions reductions

Note: Process emissions can come from a variety of sources. Because of this, emissions reductions will be highly project and operations specific. If process emissions are a significant source of greenhouse gases for your company, please add your best reductions estimate here, and consider how to discuss these sources of emissions with your leadership team.

☐ Enter the expected reductions in the Process Emissions Reduction row for 2035 and 2050

Decarbonization Lever Bucket	2035	2050
Process Emissions Reduction	10%	20%

03.10 Step 10: Include or exclude grid greening from your decarbonization strategy

☐ Select whether to include or exclude grid greening from your decarbonization strategy

Note: The grid is projected to become greener as more renewable energy sources come online. Selecting “Yes” to grid greening in this tool reduces the emissions associated with your consumed electricity in 2035 and 2050

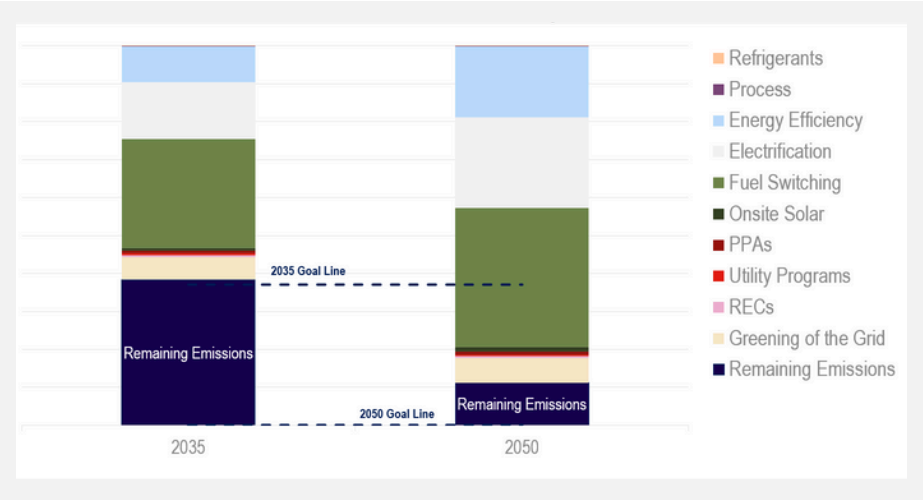
Decarbonization Lever Bucket	2035	2050
Greening of the Grid	Yes	Yes

03.11 Step 11: Adjust lever percentages to meet 2035 and 2050 goal lines

Note: Your goal is to select percentages such that the remaining emissions (the large dark purple block on the bottom) are at or below the 2035 and 2050 goal lines

☐ Revisit steps 03.05 - 03.10 and adjust your lever percentages to reduce “Remaining Emissions” at or below the 2035 and 2050 goal lines

Note: Please reference the Decarbonization Pathway Percentage Table in the bottom Appendix section (Figure 2b) of the Target-Setting Tool to see your exact percentage contributions for each decarbonization lever



03.12 Step 12: Optimize the financial outlook for your levers

- ☐ Revisit steps 03.05 - 03.10 and adjust your lever percentages to optimize the Capital Investment and Annual Expense Impact to be suitable for your company. We recommend the following:
  - If you have available Capital and are constrained by payback requirements, consider increasing Energy Efficiency and Onsite Solar percentages (within the specified limits). If space heating is a significant percentage of your fossil fuel consumption, consider increasing Electrification as well.
  - If you are you are Capital constrained but have an appetite for additional expense, consider increasing PPA, Utility Program, and REC percentages.
  - If you have neither Capital availability nor the ability to increase expense it is unlikely that you will be unable to achieve Honda's requirements. However, please reach out to Trio to discuss creative options for making progress to reduce carbon emissions.

Note: "Capital Investment" and "Annual Expense Impact" are not available for refrigerant emissions and process emissions as solutions related to these decarbonization levers are highly-specific to each organization and therefore will require additional work to refine cost implications

04 Gain leadership approval for your strategy

Roles: The Project Team will need to align on the messaging for the presentation of your decarbonization strategy to leadership. The Project Lead will draft and schedule the approval presentation

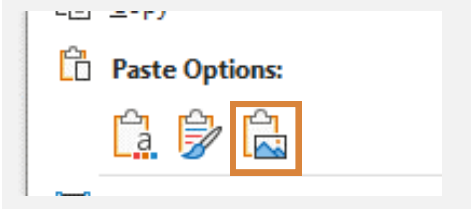
04.01 Customize the leadership PowerPoint Template

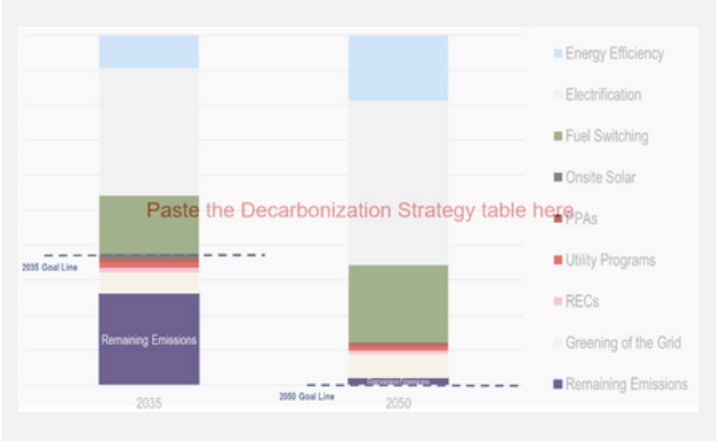
- ☐ Download the Honda Target-Setting Executive Presentation Deck
- ☐ Navigate to slide 6 – Team and add names and roles of the Project Team involved in this Action

Note: It is beneficial to communicate that this is an initiative that has alignment from key stakeholders within your company

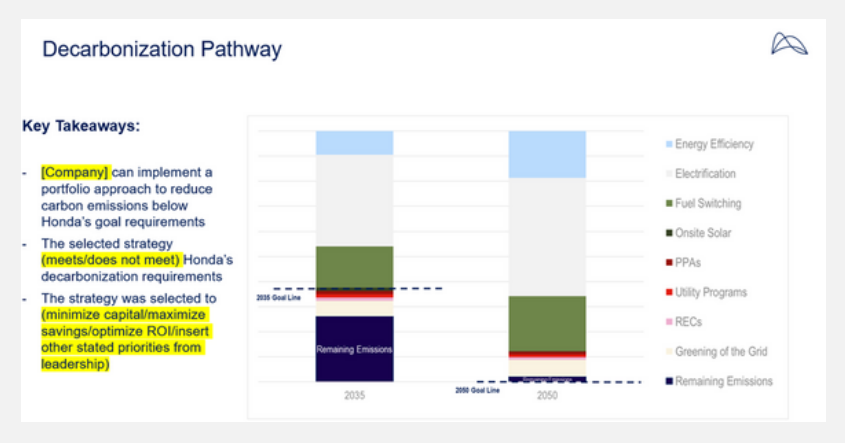
- ☐ Navigate to slide 15 – Decarbonization Pathway and copy and paste your Decarbonization Pathway chart from step 03.11 into the gray box indicated using the paste “Picture” option shown in the screenshot to the right
- ☐ Once pasted move and fit the table to align within the gray box:

Note: you will need to drag the table edges to resize it





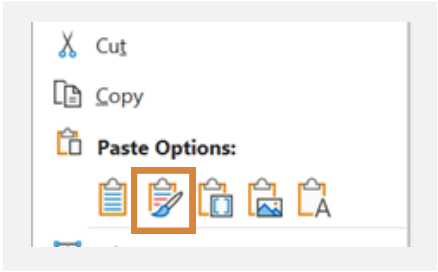
☐ The final result should look like this:



☐ Fill in the highlighted takeaways. Using the screenshot above as an example the takeaways would be filled in as follows:

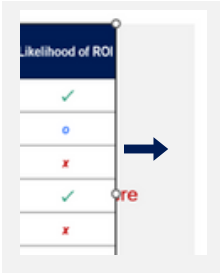
- The selected strategy meets Honda's decarbonization requirements
- The strategy was selected to minimize capital required and reduce project execution risk

☐ Navigate to slide 16 – 2035 Near-term Decarbonization Financial Implications and copy and paste your 2035 Strategy Financial Implications from step 03.12 into the gray box indicated using the paste "Keep Source Formatting" option show in the screenshot below:

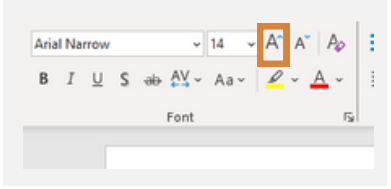


☐ Once pasted move to fit the table to align within the gray box:

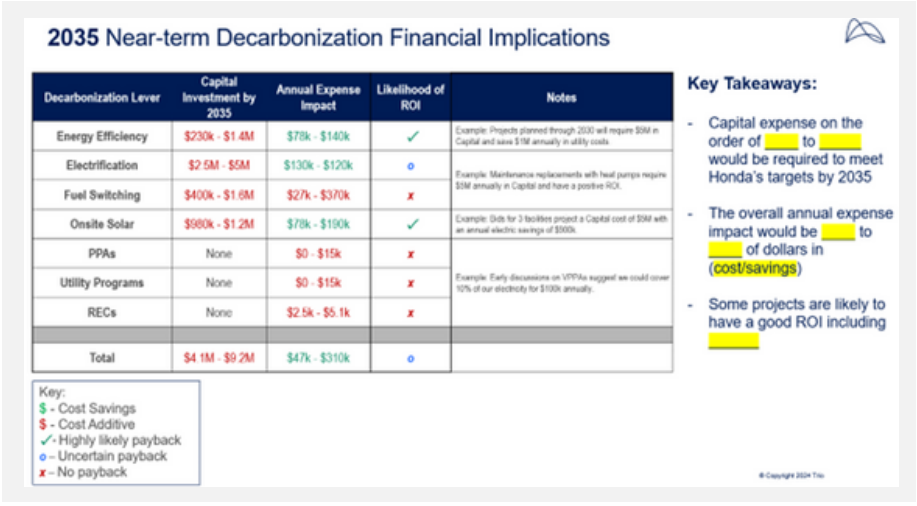
Note: you will need to drag the table edges to resize it



☐ Finally select the text and increase the font by one size by clicking the “increase font size button”



☐ The final result should look like this:



2035 Near-term Decarbonization Financial Implications

Decarbonization Lever	Capital Investment by 2035	Annual Expense Impact	Likelihood of ROI	Notes
Energy Efficiency	$230k - $1.4M	$78k - $140k	✓	Example: Projects planned through 2030 will require $5M in Capital and save $1M annually in utility costs
Electrification	$2.5M - $5M	$130k - $120k	o	Example: Maintenance replacements with heat pumps require $5M annually in Capital and have a positive ROI.
Fuel Switching	$400k - $1.6M	$27k - $370k	x	
Onsite Solar	$980k - $1.2M	$78k - $190k	✓	Example: Bids for 3 facilities project a Capital cost of $5M with an annual electric savings of $500k.
PPAs	None	$0 - $15k	x	
Utility Programs	None	$0 - $15k	x	Example: Early discussions on VPPAs suggest we could cover 10% of our electricity for $100k annually.
RECs	None	$2.5k - $5.1k	x	
Total	$4.1M - $9.2M	$47k - $310k	o	

Key:
$ - Cost Savings
$ - Cost Additive
✓ - Highly likely payback
o – Uncertain payback
x – No payback

Key Takeaways:

- Capital expense on the order of ____ to ____ would be required to meet Honda’s targets by 2035
- The overall annual expense impact would be ____ to ____ of dollars in (cost/savings)
- Some projects are likely to have a good ROI including ____

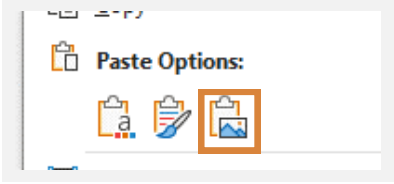
☐ Fill in the highlighted takeaways with data from the Total row in the table. Using the screenshot above as an example the takeaways would be filled in as follows:

- Capital expense on the order of $4.1M to $9.2M would be required to meet Honda’s targets by 2035
- The overall annual expense impact would be $47k to $310k of dollars in savings
- Some projects are likely to have a good ROI including Energy Efficiency and Onsite Solar

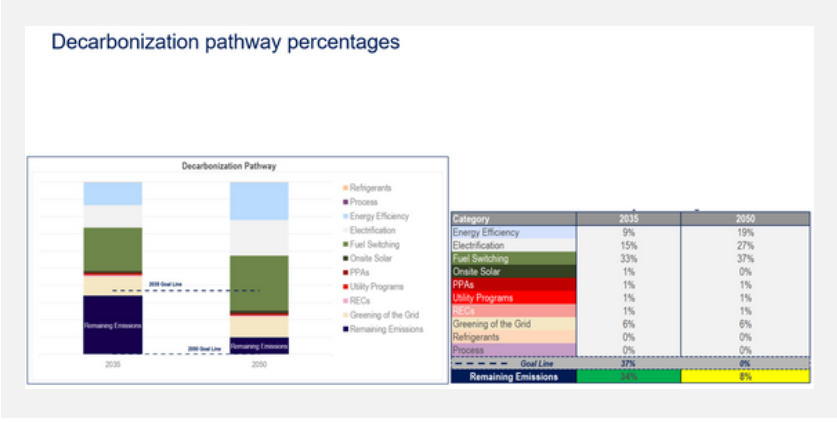
- [ ] Repeat these on slide 17 – 2050 Long-term Decarbonization Financial Implications using the 2050 Strategy Financial Implications graph from step 03.12

- [ ] Finally, navigate to slide 20 – Looking ahead to customize the next steps you believe are most relevant to your company

- [ ] Optional: navigate to slide 24 – Decarbonization pathway percentages and copy and paste the Decarbonization Pathway from the Target-Setting Tool Step 11 and the Decarbonization Pathway Percentage Reduction table from the Target-Setting Tool Step 11: Appendix using the paste “Picture” option:

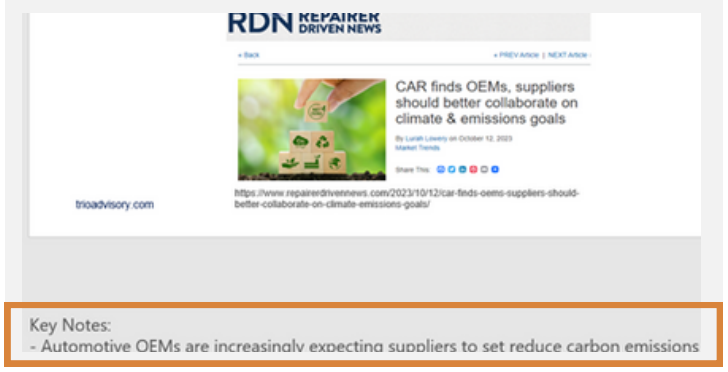


The final result should look like this:



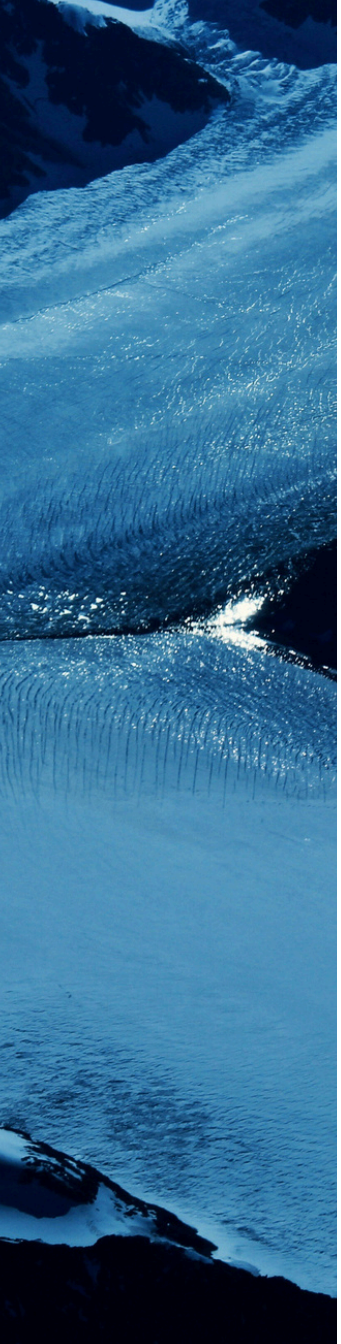
04.02 Prepare for your presentation

- ☐ Familiarize yourself with the slides in the Honda Target-Setting Executive Presentation Deck. Read the key notes provided by Trio in the notes section and be prepared to present these to executive leaders
- ☐ Meet with your Project Team to discuss who should present which slides
- ☐ Practice the presentation with your Project Team at least once before presenting to your executive team



04.03 Present the Honda Target-Setting Executive Leadership Deck

- ☐ Schedule a 90-minute meeting with your Project Team and your executive team to present the deck
- ☐ Present the deck to leadership, taking extra time on slide 5 – Objectives to make sure that everyone is clear on the purpose and goals of this presentation
- ☐ After reviewing the analysis, ask if leadership supports setting a target and ask what communications your target commitment should be sent through (ex. Sustainability report, company website, press release, etc.)



05 Report your target

Roles: The Project Lead will be primarily responsible for drafting and coordinating communications surrounding the target. Executive leadership should make the final decision on what channels the target should be communicated through, and Communications representatives on the Project Team will need to participate in sending out communications

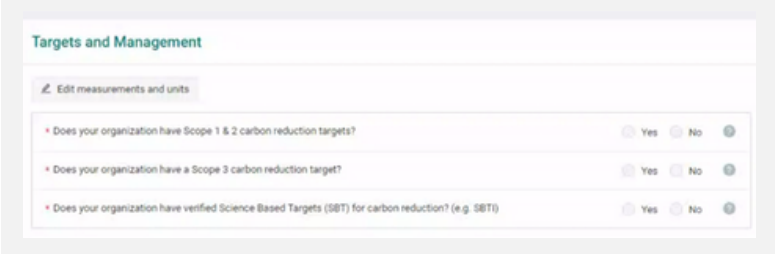
05.01 Communicate your target

- [ ] If desired, work with your Communications leads to write a statement about your target commitment

> Example: Company commits to reducing Market-based Scope 1 + 2 emissions by 63% by 2035 compared to a 2019 base year. Company also commits to fully decarbonizing by 2050

- [ ] Schedule and release your communications about your target commitment!

05.02 Report your target in M2030



- [ ] Go to the Measurements tab in M2030

- [ ] Scroll down to the Targets and Management section and set Does your organization have Scope 1&2 carbon reduction targets to "Yes"

- [ ] Optionally, complete other relevant questions in M2030 about the targets you have set including:
  - What is this facility's absolute Scope 1 & 2 emissions reduction target for 2035?
  - What is this facility's absolute Scope 1 & 2 emissions reduction target for 2050?
  - If this facility has a carbon neutral/reduction target, does it align to your organization's target?
  - If your facility has a Carbon Neutral (CO2) target, what is the target year for carbon neutrality?
  - If your facility has a Net Zero greenhouse gas (CO2e) target, what is the target year for net zero?

- [ ] Repeat the step 05.02 for all of your facilities in M2030 that supply to Honda

05.03 Receive a Certificate of Completion from Trio

- [ ] Email Trio at HondaGreenExcellence@trioadvisory.com, sending us your "Decarbonization Pathway" from step 03.09 and state that your leadership has approved this target for your company

Glossary

Absolute Emissions: Expression of a quantity of greenhouse gas (GHG) emissions in terms of mass of GHG or tonnes of carbon dioxide equivalent (CO_2e). In contrast with emissions intensity.

Activity Data: Data that quantifies the level of activity resulting in greenhouse gas emissions, such as the amount of fuel used, miles driven, electricity consumed, etc.

Base Year: A historic datum (a specific year or, in the case of a base period, an average over multiple years) against which a company's emissions are tracked over time.

Carbon Dioxide Equivalent (CO_2e): A unit used to express the impact of each different greenhouse gas in terms of the amount of CO_2 that would create the same amount of warming.

Carbon Neutral: When net greenhouse gas emissions associated with a company are zero for a defined duration. Achieving carbon neutrality involves balancing the emissions of greenhouse gases with an equal amount of carbon removal or reduction activities, such as investing in renewable energy projects or purchasing carbon offsets.

Decarbonization: The reduction of carbon dioxide emissions through the use of low carbon power sources, achieving a lower output of greenhouse gasses into the atmosphere.

Decarbonization Target (or Carbon Reduction Target): Goals set by an organization to reduce direct or indirect emissions by a specified amount.

Decarbonization Strategy (or Carbon Reduction Plan): A strategy developed by an organization that outlines how an organization plans to reduce their carbon emissions to reach a set target over a set period of time.

Net-Zero: The state where the balance between the amount of greenhouse gas emissions produced and the amount removed from the atmosphere is zero, achieved by either reducing emissions or offsetting them through measures such as carbon capture and storage or renewable energy generation.

Greenhouse Gas (GHG): Gases in the Earth's atmosphere that trap heat, contributing to the greenhouse effect. Key greenhouse gases include carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O).

Greenhouse Gas (GHG) Inventory: A comprehensive accounting of all greenhouse gas emissions associated with a company over a defined period.

Glossary (continued)

Greenhouse Gas Protocol: A widely used international accounting tool for government and business leaders to understand, quantify, and manage greenhouse gas emissions, providing standards and guidance for measuring emissions at the corporate level.
Scope 1 Emissions: Direct greenhouse gas emissions from sources owned or controlled by an organization, such as emissions from combustion in owned or controlled boilers, furnaces, vehicles, etc.
Refrigerant Emissions: Refrigerants that are not caught by a capture system and are released into the atmosphere unintentionally. For example, refrigerant gases escaping from cooling systems. (i.e., HVAC refrigerant leakage, air conditioning leakage).
Process Emissions: Emissions from physical or chemical processing other than fuel combustion
Mobile Combustion: Emissions from the combustion of fuels in vehicles and other mobile equipment owned or operated by an organization, including cars, trucks, forklifts, and airplanes. (i.e., fleet vehicles, forklifts).
Stationary Combustion: Emissions from the combustion of fuels in stationary sources, such as boilers, furnaces, and other fixed equipment used for heating or industrial processes within an organization. (i.e., natural gas boilers, diesel generators).
Scope 2 Emissions: Indirect greenhouse gas emissions associated with the purchase of electricity, steam, heat, or cooling.
Purchased electricity: Electricity that is purchased or otherwise brought into the organizational boundary of the company. (i.e. grid electricity).
Purchased heat or steam: Heat or steam (in the form of hot water) delivered to an organization's facilities through localized grid called a district energy system or through a direction connection line
Purchased cooling: Cooling (in the form of chilled water) can be delivered to an organization’s facilities through a localized grid called a district energy system or through a direct line connection.
Scope 3 Emissions: All other indirect emissions not covered in scope 2 that occur in the value chain of the reporting company, including both upstream and downstream emissions.
Supply Chain: The entire system of processes and resources required to produce and sell a product from start to finish, typically starting with raw materials and ending with the customer in possession of the product.

Resources

Honda Supplier Sustainability Resources

- Supplier Sustainability Requirements Letter
- Supplier Sustainability Excellence Framework
- Supplier Green Excellence Resource

Manufacture 2030 Resources

- Manufacture 2030 Help Center
- Your customer's requested measurements – Manufacture 2030 Help Center

Trio Resources

Environmental Sustainability 101

- Powering Decarbonization Session 1: Crafting the business case for decarbonization
  - Webinar recording; Session 1 Slides
- Powering Decarbonization Session 2: Setting a baseline for measuring carbon emissions
  - Webinar recording; Session 2 Slides
- Powering Decarbonization Session 3: Setting decarbonization goals and building a strategy
  - Webinar recording; Session 3 Slides
- Powering Decarbonization Session 4: Executing a decarbonization roadmap
  - Webinar recording; Session 4 Slides

Resources (continued)

Trio Resources

Decarbonization Action 201

- Powering Decarbonization Session 5: Energy Efficiency: Audits 101 & Guide to Incentives
  - Webinar recording; Session 5 Slides
  - Energy Efficiency Primer
- Powering Decarbonization Session 6: Clean Energy Opportunities Through Utilities & Retailers
  - Webinar recording; Session 6 Slides
  - Renewable Energy Procurement Guide
- Powering Decarbonization Session 7: Identifying Onsite and Community Solar Opportunities For Your Facilities
  - Webinar recording; Session 7 Slides
  - Onsite and Community Solar Procurement Guide
- Powering Decarbonization Session 8: Virtual Power Purchase Agreements (VPPAs) and Renewable Energy Credits (RECs)
  - Webinar recording; Session 8 Slides
  - Renewable Energy Procurement Guide