California SB 253: From Data to Disclosure

SWEEP

CALIFORNIA LAWS | SB 253 | GUIDE

In this guide, you'll learn:

✓ When to start carbon accounting, even with limited data
✓ When to use spend-based vs. activity-based calculations
✓ How to improve data accuracy for SB 253 compliance
✓ How to turn carbon data into an effective transition plan

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01 No perfect data? No problem. Start here.

California's SB 253 marks a step-change in corporate climate disclosure: from voluntary estimates to verified, decision-grade data. For many companies, the real challenge isn't awareness – it's integrating emissions data into business systems with the same rigour as financial reporting.

Organizations that invest early in **robust data architecture, supplier engagement, and auditability** will not only meet compliance demands but also gain operational visibility and resilience. Sustainability is moving from narrative to numbers – and data maturity is now a competitive differentiator.

02 Using spend-based data

A great first step in carbon accounting is using **spend-based data**, which estimates emissions by applying industry-standard emission factors to financial transactions.

This means you can start calculating your footprint based on how much you spend in different areas—like electricity, travel, and materials—without needing detailed activity records.

Why use spend-based data?

✓ **Quick and easy** – Uses existing financial data, so no need to track every activity

✓ **Helps identify hotspots** – Gives a rough idea of your biggest emission sources

✓ **Builds a baseline** – Helps you measure progress as you refine your data

Real-world examples

A tech company without detailed travel records used its **spend on flights and hotels** to estimate business travel emissions. Later, they worked with travel providers to collect more accurate flight distance data.

A retailer started by calculating emissions from **office electricity bills based on total spend**. Over time, they transitioned to tracking actual kWh usage for more precise reporting.

A manufacturer initially used supplier invoices to estimate supply chain emissions. As their **data maturity** grew, they engaged vendors for **real production data**, improving accuracy.

Selecting the right emission indicator

Emission indicators are metrics used to measure greenhouse gas (GHG) emissions across different activities. They work by applying emission factors—for example:

- **Flights:** kg CO_2 per mile flown
- **Electricity:** kg CO_2 per kWh used
- **Raw materials:** kg CO_2 per ton purchased

By understanding these indicators, businesses can track emissions over time, compare performance, and refine their carbon reduction strategies.

03 Build maturity with activity-based data

Once you've established a baseline with **spend-based data**, the next step is to improve accuracy by shifting to **activity-based data**.

This method uses actual usage data—such as liters of fuel burned, kilometers traveled, or kWh consumed—to calculate emissions, providing a more accurate measure than financial estimates.

Why use activity-based data?

✓ **Greater accuracy** – Uses real-world figures instead of industry averages

✓ **Regulatory compliance** – Meets stricter reporting requirements for ESG **regulations**

✓ **Better decision-making** – Enables more precise carbon reduction strategies

The activity-based data uses actual usage data to calculate emissions, providing a more accurate measure than financial estimates.

Example calculations using activity-based data

1. Fuel consumption (business travel)

Suppose your company used 500 liters of diesel fuel for transportation. To calculate the emissions, you multiply the liters by the emissions factor for diesel (typically around 2.68 kg CO_2 per liter):

500 liters x 2.68 kg CO_2/ liter = 1,340 kg CO_2

This gives you the total emissions for the fuel used in business travel.

2. Electricity consumption (office energy)

If your office consumed 10,000 kWh of electricity during the year and your local grid's emissions factor is 0.3 kg CO_2 per kWh, you can calculate the emissions from electricity use:

10,000 kWh x 0.3 kg CO_2/ kWh = 3,000 kg CO_2

This gives you the total emissions from electricity usage in your office.

3. Supply chain emissions (raw materials)

If your company purchased 50 tons of steel and the emissions factor for steel production is 1.8 tons of CO_2 per ton of steel, you can calculate the emissions from the steel purchased:

50 tons x 1.8 tons CO_2/ton = 90 tons CO_2

This gives you the total emissions from your raw material purchases.

04 Mastering your value chain data

Mapping your supply chain contributors

Before you can take action, it's essential to have a clear understanding of your supply chain. Mapping your supply chain contributors will give you a comprehensive view of the activities, processes, and systems involved, allowing you to identify where emissions are most concentrated.

- **Identify key suppliers:** Understand which suppliers contribute the most to your carbon footprint.
- **Visualize the supply chain:** Create a visual map to clarify what data you need from each supplier.
- **Establish a baseline:** Use the data available to create a baseline measurement of your emissions.

This initial mapping step is vital for determining where your greatest opportunities for improvement lie and will guide your engagement strategy with suppliers.

Collecting accurate data from suppliers

Once you have a clear picture of your supply chain, the next step is to collect accurate data. Focus on the suppliers that have the greatest impact, as they will be the most important to engage in your emissions reduction efforts.

Use the 80-20 rule:

- **Prioritize the top 20% of suppliers**: These suppliers are likely responsible for 80% of your emissions.
- **Simplify the data collection process:** Make it as easy as possible for your suppliers to provide the necessary data.

Tools for data collection:

- **Automate where possible:** Provide tools, such as Sweep, for your procurement and sustainability teams to streamline data collection.
- **Send surveys:** Encourage suppliers to submit data through user-friendly surveys, especially for missing information.

80-20

Prioritize the top 20% of suppliers. These suppliers are likely responsible for 80% of your emissions.

Setting targets and measuring progress

Once you've gathered initial data, it's time to set clear targets and track your progress toward achieving them.

- **Set science-based targets:** Align your targets with global climate goals, like the Paris Agreement.
- **Monitor regularly:** Regularly assess your progress to ensure that your targets are being met.
- **Engage suppliers in target-setting:** Work with your suppliers to help them set their own emissions targets, aligning with your goals.

Tracking progress on a regular basis will help you stay on top of your emissions and take corrective action as needed.

Case study

Orange's carbon accounting transformation

Challenge

Orange, one of the world's leading telecommunications and digital service providers, has set an ambitious goal to reach **net zero by 2040** – a decade ahead of industry recommendations.

Operating in **26 countries, including a growing US presence through Orange Business**, the company faced a complex challenge: consolidating fragmented carbon and ESG data across business units, geographies, and supply chains. Manual reporting made it difficult to ensure data quality, monitor progress, and engage suppliers effectively.

Solution

After evaluating 22 global sustainability software vendors, Orange selected **Sweep** to centralize its carbon and ESG information in a single, auditable system. Sweep's enterprise-scale capabilities, collaborative tools, and strong alignment with global reporting standards made it the ideal partner.

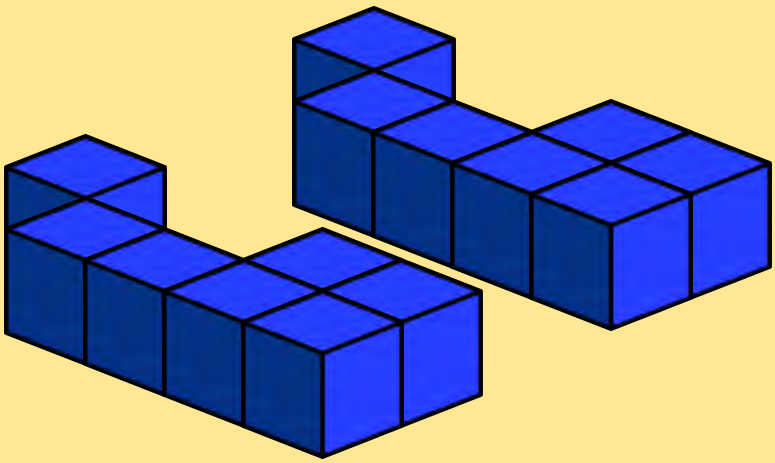
Results

✓ 30% reduction in Scopes 1 & 2 emissions achieved **two years ahead of schedule**
✓ Centralized carbon and ESG data spanning 26 countries
✓ Improved supplier collaboration and transparency
✓ On track for **net zero by 2040** – ten years ahead of industry targets

“With Sweep, we can model reduction initiatives and decide which measures to prioritise.

It gives us a solid, evidence-based roadmap to reach our climate targets — and the flexibility to adapt as our data evolves.”

Res Witschi
Delegate for Sustainable Digitalization, Swisscom



05 Comply with key legislation

Data is at the core of corporate climate compliance in the United States.

With new legislation like California's SB 253 and SB 261, companies operating in the US face growing requirements to measure, manage, and disclose their environmental impact. While each regulation and reporting framework varies in scope, they all share a common requirement: accurate and reliable data.

Whether tracking carbon emissions, energy use, or supply chain activity, US businesses need strong data systems to meet these mandates and maintain credibility with investors, regulators, and customers. From state-level laws like California's SB 253, which requires large companies to disclose their greenhouse gas emissions, to voluntary frameworks such as CDP, a solid data foundation is essential for credible and consistent sustainability reporting.

California SB 253: the Climate Corporate Data Accountability Act

California's SB 253, known as the Climate Corporate Data Accountability Act, requires large companies doing business in the state to publicly disclose their greenhouse gas (GHG) emissions. It's the first law of its kind in the US, covering Scopes 1, 2, and 3 emissions.

The goal is to increase transparency and accountability among major corporations that operate or sell into California, whether headquartered there or not.

Who it applies to

SB 253 applies to any public or private company with over $1 billion in annual revenue that does business in California. The definition is broad: even companies with limited operations, sales, or employees in the state may fall under its scope. This means many large US and multinational firms will be subject to the law.

Reporting timeline

2026	2027
Report **Scope 1 and 2** emissions (based on FY 2025 data)	Report **Scope 3** emissions (based on FY 2026 data)

Standards and format

- Must follow the **Greenhouse Gas Protocol** for methodology and boundaries
- Reports submitted via a public **digital platform** managed by the **California Air Resources Board (CARB)**

Verification

- **Independent assurance** required for all reports
- **Limited assurance** for Scopes 1 and 2 initially
- **Scope 3 assurance** phased in at a later date

Compliance and transparency

- **CARB** will review submissions and may impose **administrative penalties** for non-compliance
- All disclosures will be **publicly available**, increasing visibility for investors, regulators, and consumers

What companies should do now

Companies should begin assessing whether they meet the revenue and activity thresholds for doing business in California.

Those that do should start building a complete GHG inventory, strengthen data systems, and prepare for assurance requirements. Engaging suppliers early will be critical to improve the accuracy of Scope 3 data and to demonstrate progress on reduction goals.

Voluntary ESG reporting frameworks

Voluntary reporting frameworks, like the CDP and GRI, allow companies to go beyond legal compliance and demonstrate their commitment to sustainability. While not legally binding, these frameworks help businesses enhance ESG reporting, engage stakeholders, and build credibility.

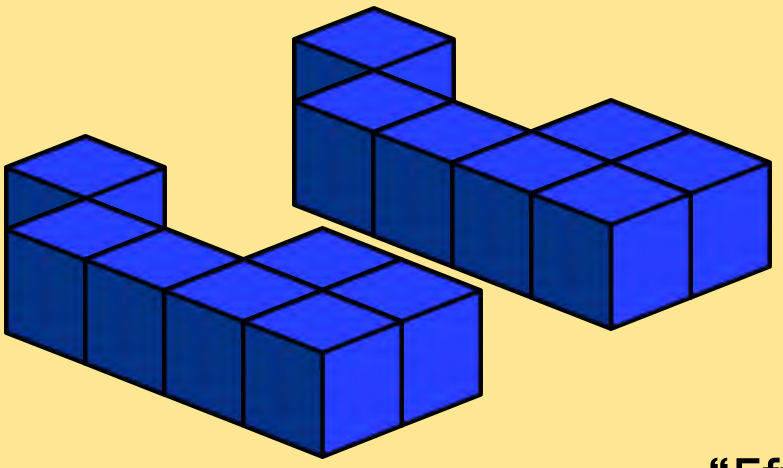
The CDP, for example, focuses on carbon footprint, water usage, and supply chain sustainability, while the GRI provides guidelines for reporting on a broad range of ESG issues. Many investors and customers view participation in these frameworks as a sign of a company's dedication to environmental and social responsibility.

Upload your data once – use it everywhere

The good news is that much of the data required by various ESG regulations overlaps.

This is where ESG software can make a significant difference.

Sweep allows you to upload your data once and use it across all relevant frameworks, reducing duplication and ensuring consistency. ESG platforms streamline the data collection, management, and reporting process, allowing you to meet compliance requirements for multiple regulations with minimal effort. By centralizing your data, you ensure that it remains accurate, transparent, and ready for review at any time.



“Effective climate transition is more than a corporate duty; it is crucial for unlocking capital and enhancing long-term profitability.”

Paul Simpson
Partner at ERM

ERM

06 Building your transition plan

By this stage, you've learned how to collect and refine your carbon data, navigate different calculation methods, and ensure compliance with key regulations. But data alone isn't enough. The real challenge—and opportunity—lies in using this information to drive meaningful change.

A strong transition plan doesn't just help you meet compliance requirements—it positions your business for resilience, efficiency, and growth in a low-carbon economy.

In this chapter, we'll explore how to turn carbon data into a clear, actionable strategy. From setting science-based targets to engaging stakeholders and securing investment, we'll break down the key steps to building a transition plan that delivers real impact.

Building your transition plan

Developing an effective climate transition plan requires a structured approach. The following steps can help organizations create a climate transition plan that meets regulatory and investor expectations.

1. Engage key stakeholders

A transition plan is not just a sustainability document—it is a strategic business tool that requires input from key stakeholders across the company. Engaging executives, finance teams, legal departments, and supply chain managers ensures that the plan is integrated into core business operations.

2. Define clear transition goals

A strong transition plan should include measurable climate transition goals, such as:

- Reducing greenhouse gas emissions across Scope 1, 2, and 3
- Investing in renewable energy and energy efficiency improvements
- Strengthening supply chain resilience to address climate variability
- Setting clear targets helps businesses stay on track and demonstrate progress in their climate transition journey.

3. Integrate with business strategy

A transition plan must align with financial planning and risk management. Companies should assess:

- How climate risks impact their financial stability
- Whether business expansion plans align with climate transition goals
- Opportunities for innovation in response to climate models and regulatory shifts

By embedding climate related financial disclosures into corporate strategy, businesses can enhance transparency and accountability.

4. Structure the transition document effectively

A well-organized transition document should include:

- An executive summary outlining key climate transition goals
- A detailed roadmap explaining how the company will reduce greenhouse gas emissions
- Governance and oversight structures to ensure accountability
- Metrics and performance indicators for tracking progress

The Transition Plan Taskforce recommends using clear and structured reporting formats to improve accessibility for investors, regulators, and other key stakeholders.

Put your transition plan into action

A climate transition plan is more than a document—it is a strategic tool that guides a company's evolution toward a low-carbon economy. By this stage, you've learned how to develop a credible transition plan by embedding it within your business strategy, setting clear, science-based targets, and ensuring strong governance and accountability. The challenge now is to move from planning to execution.

Securing leadership alignment

The first step is securing leadership alignment and integrating the transition plan into core business decision-making. A well-structured plan is only effective if it has buy-in from executives, investors, and key stakeholders. Climate governance mechanisms —such as board-level oversight and climate-linked incentives— must be in place to drive meaningful change. Without clear accountability, even the most ambitious plans risk becoming empty commitments.

Identify and prioritize key transition initiatives

Once leadership is aligned, companies must identify and prioritize key transition initiatives. This means translating long-term net-zero targets into immediate, actionable steps. Companies should assess the financial implications of each initiative, allocate resources effectively, and integrate milestones into existing corporate strategies. Successful transition plans align with financial planning and risk management, ensuring that climate action is not seen as an isolated sustainability effort but as a core component of business resilience.

Transition plans must be dynamic, adapting to new data, evolving regulations and shifts in the business landscape.

Establish reporting and monitoring

A strong reporting and monitoring framework is essential to track progress and maintain credibility. Transition plans must be dynamic, adapting to new data, evolving regulations, and shifts in the business landscape. Companies should establish clear performance indicators, report on progress at regular intervals, and remain transparent about any adjustments to their strategy. By aligning disclosures with established frameworks—such as the ISSB, TCFD, or the UK's Transition Plan Taskforce—businesses can ensure compliance while reinforcing investor confidence.

Secure investment for successful implementation

Finally, the ability to secure investment will determine whether a transition plan can be successfully implemented. Investors are increasingly scrutinizing companies' climate strategies, expecting clear, financially sound roadmaps for decarbonization. Businesses must effectively communicate how their transition plan mitigates risk, enhances long-term value, and aligns with global climate goals. Accessing green finance, sustainability-linked loans, or investor-backed transition funds can provide the capital needed to accelerate action.

Evolving the transition plan over time

Transition plans are not static—they must evolve alongside regulatory developments, business priorities, and climate science. Regular reviews, scenario analysis, and stakeholder engagement ensure that companies stay ahead of emerging risks and opportunities. By embedding climate considerations into every aspect of decision-making, businesses can not only meet compliance requirements but also position themselves as leaders in the transition to a sustainable economy.

Navigating decarbonization for future success

Embarking on your decarbonization journey may feel like a challenge, but the benefits are significant. Beyond meeting regulatory requirements, you'll unlock cost savings, enhance operational efficiency, boost corporate reputation, and elevate stakeholder satisfaction. Actively engaging in the sustainability movement opens doors to valuable networks, shared knowledge, and goodwill, positioning you on the right side of history.

Ready to get started?

We're here to support you at every step. And your suppliers can get started for free!

Our free plan lets companies measure their emissions in Sweep – so you can invite all your suppliers. And once their measurements are in our platform, we can help them get further along their own carbon track.

Get in touch today.

“Sweep stood out among 22 sustainability software vendors, including major global players. They won because they were simply the best.”

Christel Heydemann
CEO, Orange

SWEEP

The leading sustainability data management platform.

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