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SB 253 and SB 261:
California's New Climate Disclosure Mandates

Prepare Now. Avoid Penalties

In partnership with Big Pivot Partners and ISOS Group.

Climate Disclosure Blueprint

How to Use This Blueprint

This blueprint is designed to help organizations subject to California SB 253 and SB 261 begin crafting their own climate-related disclosures. It adapts the Sunrise Insurance example into a universal, industry-agnostic structure that aligns with California's climate risk and emissions reporting requirements. It is followed by a designed copy of a fictitious global manufacturing company's public disclosure.

What This Is:

- A starter guide to demonstrate how a comprehensive, TCFD-aligned disclosure might be structured.
- A framework to help internal teams organize their thinking around governance, risk, strategy, and financial exposure to climate change.
- A tool to encourage consistency, comparability, and clarity across reporting organizations—especially those with operations in California and beyond.

What This Is Not:

- It is not a substitute for rigorous, data-driven analysis of your specific risks.
- It does not reflect the full legal, financial, or operational complexity your organization may face.
- It should not be used to fulfill your disclosure obligations without support from qualified experts.

Why Expert Support Matters:

- California's climate disclosure regulations, like SB 253 and SB 261, require:
- Auditable GHG emissions inventories (SB 253) in line with the Greenhouse Gas Protocol.
- Scenario-based physical climate risk analysis (SB 261), informed by best-available science.
- Integration with financial risk planning, governance structures, and enterprise risk management systems.

The level of complexity and nuance involved in building robust, decision-useful disclosures—especially for global companies or those in high-impact sectors like manufacturing, agriculture, logistics, and energy—means that working with a qualified climate risk advisory firm or consultancy is essential.

These professionals can:

- Translate regulatory language into business implications.
- Tailor scenario modeling to your specific operations, supply chains, and geographies.
- Guide internal coordination between ESG, finance, operations, and compliance teams.
- Ensure your disclosures are credible, defensible, and future-ready—particularly as regulations evolve or come under scrutiny.

Use With Discretion — Pending Final CARB Guidance:

This blueprint is based on the current language of SB 253 and SB 261, and on frameworks like TCFD, GHG Protocol, and CDP, which the legislation references. However, the California Air Resources Board (CARB) has not yet released its final implementation guidelines for these laws. As such:

- All content provided here should be used with discretion and flexibility.
- Your company should be prepared to adjust disclosures and methodologies once CARB publishes its final rules (expected by 2025).
- Early planning and internal alignment using this blueprint will still be valuable and directionally sound, but compliance efforts must remain agile.

Getting Started:

- Use this blueprint as an internal education and planning tool.
- Share it with cross-functional leaders (e.g., finance, legal, ops, sustainability).
- Begin identifying your current data gaps, climate risks, and strategic vulnerabilities.
- Engage a qualified climate or ESG advisory team to develop your actual reporting deliverables.

1. Executive Summary (SB 261)

PURPOSE:

Summarize the company's climate risk disclosure, including:

- Why the report is being published (SB 261 compliance).
- High-level climate risks identified (wildfire, heat, flood, drought, supply chain disruptions).
- Key findings: exposure, financial impact, and strategic responses.
- Summary of actions taken or planned.

BLUEPRINT EXAMPLE:

This report has been prepared to comply with California Senate Bill 261. It provides an overview of [Company Name]'s physical climate risk exposure across global and California operations. Key risks include [X, Y, Z], with California sites particularly vulnerable to [wildfire/flood/heat]. This year's analysis shows [summarized impact], leading to a strategic response involving [ABC measures].

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2. Introduction

PURPOSE:

Ground the reader in the regulatory context and company operations.

BLUEPRINT FORMAT:

- Brief overview of SB 261 (and SB 253 where relevant).
- Summary of business operations (by geography, sector, and supply/value chain).
- Data sources, methodology (e.g., TCFD-aligned, using RCP scenarios).

EXAMPLE:

This report addresses the requirements of SB 261 by assessing physical climate risks across [Company Name]'s global manufacturing footprint, with emphasis on our California-based facilities. We used historic loss data, hazard maps, and scenario modeling aligned with the California Climate Assessment and IPCC RCPs.

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3. Governance

PURPOSE:

Demonstrate oversight and accountability for climate-related financial risk.

BLUEPRINT FORMAT:

- Describe governance structure (e.g., climate risk committee, ESG board subcommittee).
- Explain executive roles in managing climate risk.
- Reference internal controls and enterprise risk integration.

EXAMPLE:

Climate risk oversight is led by a cross-functional Climate Risk Committee that reports quarterly to the Board ESG Committee. This body oversees both transition and physical risk across supply chains, assets, and capital investment plans.

4. Strategy

PURPOSE: Show how climate risks inform corporate strategy and investments.

BLUEPRINT FORMAT:

- How climate risks are integrated into risk management, investment decisions, capital planning.
- Describe targets or goals (e.g., decarbonization, supply chain resilience).
- Distinguish between short-, medium-, and long-term strategy.

EXAMPLE:

[Company] is pursuing a global climate strategy including adaptation of production sites, decarbonization of Scope 1-2 emissions, and transitioning to more climate-resilient suppliers in Southeast Asia and Central America.

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5. Climate Hazards & Physical Risk Profile

PURPOSE:

Map climate hazards to business operations.

BLUEPRINT FORMAT:

- Summarize climate trends affecting operations (globally and in California).
- Break down by hazard: wildfire, flood, extreme heat, sea level rise, drought.
- Link to operational risks (e.g., water usage, energy demand, worker safety).

EXAMPLE:

Our manufacturing hub in the Inland Empire is exposed to rising wildfire risk and extreme heat, with 2024 temperatures exceeding historic norms by 3°F. This impacts both operations and workforce safety protocols.

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6. Exposure & Vulnerability Assessment

PURPOSE:

Quantify how assets and operations are exposed to climate risks.

BLUEPRINT FORMAT:

- Geographical mapping of exposure (globally and in California).
- Use of scenario analysis (e.g., RCP 4.5, 8.5).
- Include metrics (e.g., loss ratio, downtime, asset vulnerability).
- Optional: case study of past disruption.

EXAMPLE:

Under RCP 4.5, by 2035, 40% of our California production capacity will be in zones of high wildfire exposure, up from 28% today. Vulnerability modeling shows 25% potential downtime increase without additional mitigation investment.

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7. Scenario Analysis & Stress Testing

PURPOSE:

Evaluate financial and operational resilience under different futures.

BLUEPRINT FORMAT:

- Describe scenarios used and assumptions (climate and economic).
- Quantify impact on key financial indicators (OPEX, insurance costs, CAPEX delays).
- Summarize results: resilience vs. risk.

EXAMPLE:

Under Scenario A (RCP 4.5), we project a 35% increase in California facility insurance premiums and 10% revenue risk in the event of multi-day power disruptions from wildfire-related grid stress.

8. Financial Impact Assessment

PURPOSE:

Disclose historical and forecasted financial impacts from climate.

BLUEPRINT FORMAT:

- Past losses or disruptions attributed to climate events.
- Projected future costs (insurance, damage, relocation).
- Indirect impacts: input cost volatility, supply chain disruptions, regulatory penalties.

EXAMPLE:

Wildfire-related production halts in 2022 and 2023 caused $12 million in losses. Projected impacts under moderate warming total $35–40 million annually by 2035 without mitigation investment.

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9. Investment Portfolio Analysis (SB 253 Tie-In)

PURPOSE:

Examine transition risks in financial assets and investments.

BLUEPRINT FORMAT:

- Disclose carbon intensity, high-carbon asset exposure.
- Detail efforts to shift toward low-carbon or ESG-aligned investments.
- Optional: alignment with Paris Agreement, net-zero goals.

EXAMPLE:

In 2024, 15% of our capital investments were exposed to carbon-intensive suppliers. We've adopted PCAF to track financed emissions and plan to shift 30% of strategic investments toward renewable energy value chains by 2030.

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10. Risk Management & Mitigation

PURPOSE:

Document current and planned responses to climate risks.

BLUEPRINT FORMAT:

- Operational: upgrades, relocations, technology changes.
- Financial: insurance, hedging, reserve adjustments.
- Community: engagement, partnerships, resilience-building.

EXAMPLE:

In 2023, we upgraded HVAC and cooling infrastructure across 5 plants in California. We also joined the CA Industry Resilience Council to develop shared wildfire risk response protocols.

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11. Recommendations & Next Steps

PURPOSE:

Show commitment to continuous improvement and stakeholder transparency.

BLUEPRINT FORMAT:

- Improvements in data, modeling, and internal risk systems.
- Planned stakeholder engagement (e.g., suppliers, investors).
- Proposed policy/regulatory engagement.

EXAMPLE:

We plan to enhance facility-level climate hazard monitoring by 2026 and develop GHG emissions reduction roadmaps for all Tier 1 suppliers by 2027.

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12. Appendices

PURPOSE:

Provide technical detail and transparency.

BLUEPRINT FORMAT:

- Emissions inventory (Scopes 1, 2, 3).
- Facility-level exposure tables.
- Scenario modeling assumptions.
- Methodologies and data sources.

GLOBALTECH MANUFACTURING

OUR WORK HAS IMPACT

Climate Risk and Resilience Report
Prepared in accordance with California SB 253 & SB 261
Reporting Year: 2025

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GLOBALTECH MANUFACTURING

2025 KEY FINDINGS

Executive Summary

GlobalTech Manufacturing Inc. is a multinational producer of industrial equipment and electronics with significant operations in California. In compliance with California Senate Bills 261 and 253 and aligned with the recommendations of the Task Force on Climate-Related Financial Disclosures (TCFD), this report discloses our material climate-related financial risks, the resilience of our business strategy, and our greenhouse gas emissions profile.

GlobalTech Manufacturing has completed over 10,000 projects with a 99.2% on-time delivery record. We serve as a trusted partner for Fortune 500 companies and emerging technology leaders requiring complex manufacturing solutions

Mission

To deliver innovative manufacturing solutions through precision engineering, advanced technology, and uncompromising quality standards.

About this Report

In this report, we discuss our approach to evaluating and managing climate change risks and opportunities and follow the recommendations of the Task Force on Climate-Related Financial Disclosures (TCFD). This report includes financial and non-financial information about the Company's activities and metrics related to environmental sustainability for the fiscal year 2025, unless otherwise noted.

Disclaimer:

This document provides high-level sample responses that may or may not be relevant to specific companies. Its purpose is to provide an overview of the type of information included in TCFD reports. We encourage you to review peer TCFD reports for further insight. TCFD disclosures generally span 20-30 pages. Some are much longer (70+ pages), and few aligned responses are significantly shorter.

30%

California facilities are in zones at high risk of wildfires.

25M/year

Projected physical climate-related losses by 2035 under RCP 4.5.

2024 GHG Emissions

Scope 1: 12,500 $MTCO_2e$
Scope 2: 28,000 $MTCO_2e$
Scope 3: 310,000 $MTCO_2e$

Resilience Initiatives

Includes fire-resilient infrastructure, rooftop solar (25 MW), water recycling, and a supplier screening program.

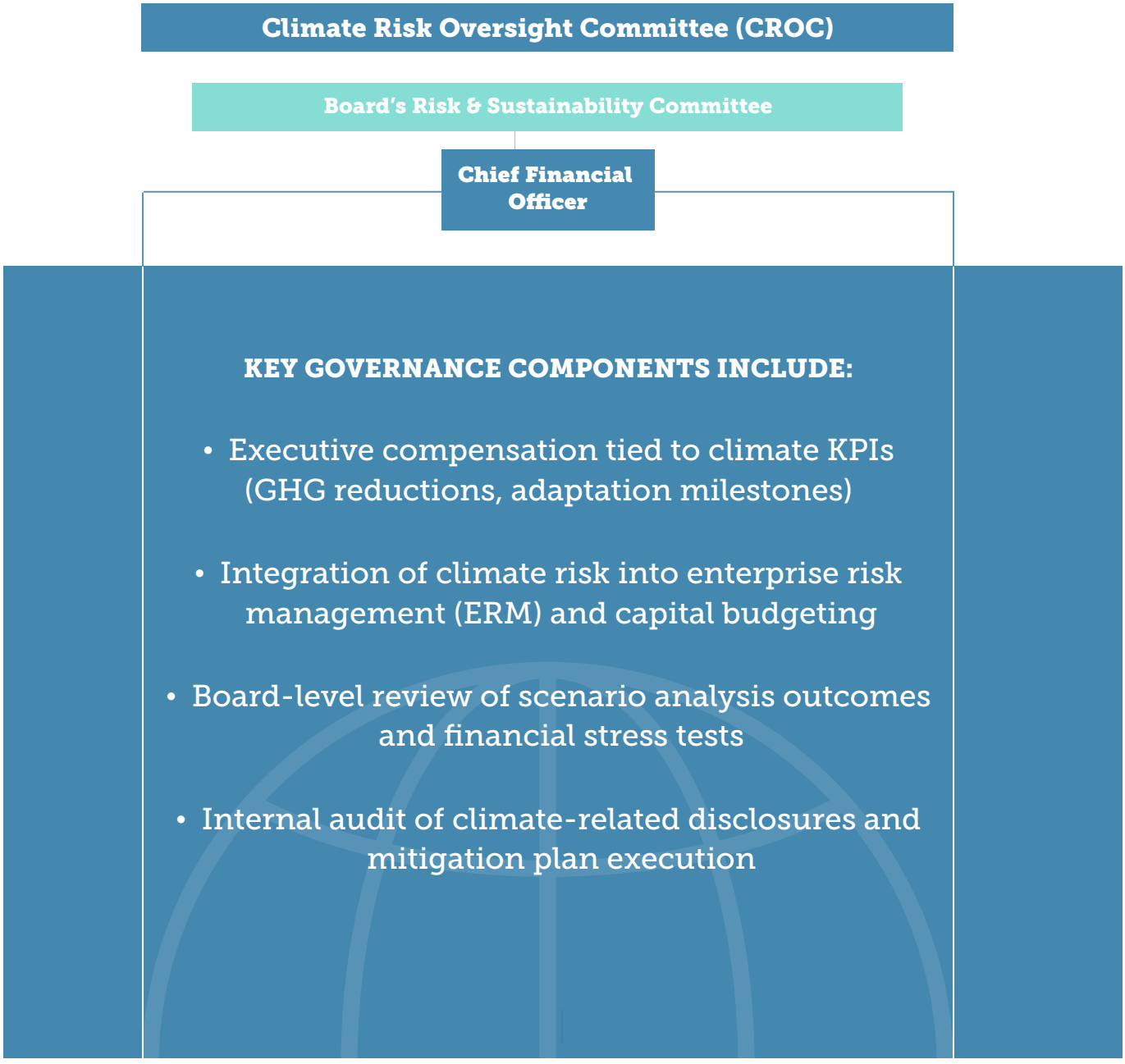
Introduction

This report assesses GlobalTech's material climate-related financial risks and outlines the strategies we are implementing to mitigate and adapt to those risks. The scope of this report includes:

- All operations and facilities, with a focus on California-based assets and suppliers
- Material physical and transition risks projected through 2035
- Alignment with the framework of the Task Force on Climate-Related Financial Disclosures (TCFD) and California climate accountability rules (SB 261 and SB 253)
- Integration of scenario analysis, risk management, and emissions targets

Governance & Climate-Related Oversight

Climate-related oversight is led by the Climate Risk Oversight Committee (CROC), chaired by the CFO and reporting quarterly to the Board's Risk & Sustainability Committee.



Strategy

GlobalTech's climate strategy integrates both physical and transition risk considerations across four pillars:

GLOBALTECH MANUFACTURING

Four-Pillar Climate Strategy

Risk Identification

Geospatial analysis, policy horizon scanning, and climate vulnerability assessment of operations and value chain.

Resilience Investment

Facility retrofits for heat and wildfire, adaptive water systems, and distributed renewables.

Supply Chain Management

Tier 1 and Tier 2 supplier assessments based on emissions and climate exposure.

GHG Reduction Targets

50% Scope 1+2 reduction by 2030; 30% Scope 3 reduction target aligned with SBTi framework.

Climate Hazards Facing GlobalTech

Wildfires

6 facilities in moderate-to-high wildfire zones (Butte, Riverside)

- Insurance premiums up 22% since 2021
- $3.4M loss in 2023 from Oroville shutdown due to fire

Extreme Heat

- 2024: 22 days >105°F in Central Valley
- Electronics failure and reduced productivity

Flooding

- Inland and coastal facilities face flash flooding threats
- 4 sites lack adequate storm water defenses

Drought

- Process water scarcity impacting fabrication in Fresno
- Upstream suppliers in water-stressed zones

Physical Risks

The company faces a range of physical climate risks, both acute and chronic, which may disrupt operations, increase costs, or affect the availability of critical resources. Acute risks include extreme heat events, flooding, and wildfires in regions where key facilities, suppliers, or customers are located. Chronic risks include sea level rise and long-term shifts in temperature or precipitation patterns, which may degrade infrastructure performance or raise insurance costs. The company has initiated location-specific risk assessments to identify high-exposure sites and inform adaptation planning.

Vulnerability and Asset Exposure

REGION	FACILITIES	WILDFIRE RISK	FLOOD RISK	DROUGHT RISK
California (All)	14	6 High 4 Moderate	5 High 3 Moderate	8 High
U.S. (non-CA)	22	2 Moderate	4 Moderate	6 Moderate
Asia-Pacific	15	Low	High	Moderate
Europe	10	Low	Low	Low
Latin America	9	Moderate	High	High
Global Total	**70**	–	–	–

Transition Risks

The company is exposed to a range of transition risks as the global economy moves toward decarbonization. These include evolving climate-related regulations, such as carbon pricing, emissions disclosure mandates, or product-specific efficiency standards. Market shifts, driven by investor preferences, customer demand, or technological change, may require updates to existing products, services, or operations. Reputational risks may also arise if stakeholder expectations outpace the company's climate performance or transparency. The company is actively monitoring regulatory developments and evaluating the resilience of its business model to these transition dynamics

Opportunities

The transition to a low-carbon economy presents a range of opportunities for the company. These include increased demand for sustainable products and services, improvements in energy efficiency, and potential cost savings from renewable energy adoption. Enhanced climate performance may also strengthen the company's brand reputation, attract sustainability-focused investors, and improve access to green financing. The company is actively evaluating opportunities to align its offerings with market and regulatory trends toward decarbonization and climate resilience.

Risk Management

Climate risks are integrated into the ERM framework. Key activities include the following:

- Quarterly climate risk reviews incorporated into corporate risk register
- Threshold-based escalation for asset impairment, insurance gaps, and regulatory exposure
- Supplier risk scoring based on climate vulnerability and emissions
- Physical risk dashboards deployed at site level with automated alerts

Risk Mitigation (reporting year):

- Fire-Resilient Infrastructure: Sprinkler retrofits and ember-resistant exteriors
- Rooftop Solar: 5 facilities now solar-powered (25 MW total)
- Water Recycling: 7M gallons saved at Fresno facility in 2024
- Climate-Ready Supplier Program: 60 enrolled Tier 1 vendors
- Insurance Review: New reinsurance agreements in place

Scenario Analysis

We analyzed two scenarios consistent with TCFD guidance:

Scenario A:

RCP 4.5 / NGFS "Orderly Transition" (2035) Assumes moderate policy action and early adaptation.

- Carbon pricing at $75/ton by 2035
- Electrification incentives and moderate regulation
- Physical risks escalate gradually

IMPACT

- **Annual climate-related losses in California projected at $25M (mostly wildfire, drought)**
- **Capital expenditure shift of $120M over 10 years to decarbonize operations**
- **Moderate cost increases in raw materials and energy (~4%)**
- **Supplier disruptions expected in 2-3 high-risk product categories**

Scenario B:

RCP 8.5 / NGFS "Hot House World" (2035) Assumes no new policies beyond 2022 and delayed mitigation.

- Carbon pricing low (<$30/ton); widespread regulatory failure
- Extreme physical risk: >76% increase in losses vs. 2025
- Chronic disruptions from heat, water stress, and insurance market withdrawal

IMPACT

- **$38M in projected annual losses in California alone**
- **Insurance premiums unviable for 3 facilities by 2030**
- **$100M in asset impairment risk in California and Southeast Asia**
- **Potential loss of EU market access without low-carbon product transition**

METRICS AND GHG EMISSIONS (2024):

SCOPE	2024 EMISSIONS ($MTCO_2e$)	CALIFORNIA SHARE	2030 TARGET (GLOBAL)
Scope 1	58,000	12,500 (22%)	29,000 (–50%)
Scope 2	110,000	28,000 (25%)	55,000 (–50%)
Scope 3	1,450,000	310,000 (21%)	1,015,000 (–30%)

TARGETS

- 50% reduction in Scope 1+2 by 2030 from 2020 baseline
- 30% reduction in Scope 3 by 2030
- Carbon intensity target: <120 tCO_2e/$M AUM globally; <140 tCO_2e/$M AUM in California

DEPLOYED AND PLANNED INVESTMENTS

- $28M deployed in California for renewables in 2024; $45M committed through 2030
- $17M spent on climate resilience retrofits in high-risk regions
- $20M reserve established for climate-related business disruption

FINANCIAL IMPACT

- Historical climate-related losses (2018–2024): $42M
- Insurance premiums: 15–25% increase in high-risk zones
- Asset impairment risk: $100M
- Scenario-adjusted cash flow projections completed for top 10 facilities

NEXT STEPS

- Finalize third-party verified Scope 3 inventory
- Publish facility-level risk dashboards by 2025
- Expand adaptation measures to 4 additional California sites
- Conduct board-level review of transition risk stress testing
- Disclose annually through CDP and TCFD-aligned reports

Suggested Appendices

Appendix A
Detailed Climate Scenario Inputs and Assumptions

Appendix B
Methodologies Used (CalAdapt, NGFS, GHG Protocol, PCAF)

Appendix C
Asset-Level Vulnerability Tables

Appendix D
Glossary of Climate Risk Terms

Appendix E
TCFD and SB 261 Compliance Crosswalk

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