



Silicon Valley Transit Consultants
1742 North First Street, Suite 400
San José, California 95112

HOSTED BY SVTC AND VTA

MENTOR PROTEGE' WORKSHOP #7

The Impact of Climate Change: Transitioning to a Sustainable & Resilient Business Model

**Noon, Thursday
October 14, 2021**

Presenters: Sue Kemball-Cook, Senior Project Director &
Emily Wasley, Practice Leader, Sustainability, Energy and Climate Change Team, WSP



A misty forest of tall evergreen trees, likely spruce or fir, filling the background of the slide. The trees are dark green and silhouetted against a light, hazy sky. The mist is most prominent in the middle ground, creating a sense of depth and atmosphere.

The Impact of Climate Change

Transitioning to a Resilient and Sustainable Business Model

Today's speakers



**Emily
Wasley**

Practice Leader
San Francisco, CA WSP USA

- Nationally recognized expert on climate change research, policy, and strategy with 16 years of experience
- WSP USA lead on TCFD and climate risk, adaptation, and resilience focusing on assessing and managing physical and transition risks and opportunities under uncertainty



**Sue
Kemball-Cook**

Senior Project Director
San Francisco, CA WSP USA

- 20 years experience with expertise in climate modeling, climate risk assessment, scenario analysis and TCFD
- Climate scientist directing transition and physical climate risk and opportunity assessments for Fortune 500 companies and asset-level climate risk assessments

Agenda

- Key drivers
- Key trends
- Our approach

Poll Questions:

- 1. Is climate change affecting your work now?**
- 2. Are your clients asking you about ESG- or climate-related services?**
- 3. Is your organization interested in becoming more sustainable and resilient itself?**

An aerial photograph of a vast, winding river system, likely the Amazon basin, characterized by numerous large, forested islands and peninsulas. The water is a deep blue-grey, and the surrounding land is covered in dense, vibrant green tropical forest. The perspective is from a high angle, looking down on the intricate network of waterways and landmasses.

Key Drivers

Why address climate change now?



6

**Climate Change and
Extreme Events**

**Investor Interest and
Requests**

**Regulatory and
Country-level Drivers**

**Market Shifts and
New Opportunities**

“Climate change has become a defining factor in companies’ long-term prospects”

-Larry Fink, Blackrock CEO

The traditional Environmental, Social, and Governance (ESG) ecosystem is expanding

Governing Principles



Reporting Frameworks



Rating Agencies



Where is the market heading?

Investors Requesting Climate Disclosures



8 *"We know that climate risk is investment risk. But we also believe the climate transition presents a historic investment opportunity."*

- Larry Fink, CEO BlackRock in his 2021 Letter to CEOs

Regulators Requesting Climate Disclosures



"There are tens of trillions of dollars of investor dollars that are going to be looking for more information about climate risk."

- Gary Gensler, Chair of the U.S. SEC

Countries Mandating Climate Risk Disclosures

In June 2021, the G7 announced support for mandatory climate reporting

United Kingdom
(March 2021)



New Zealand
(May 2021)



France (June 2021)



Switzerland
(August 2021)



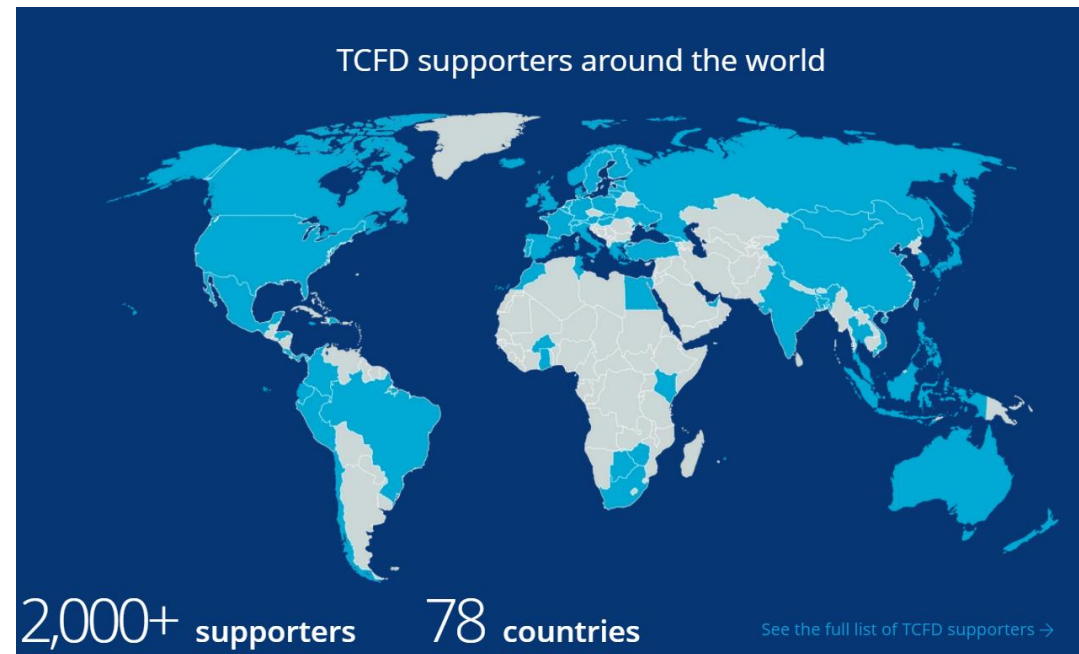
In May 2021, President Biden signed an Executive Order on Climate-related Financial Risk

The Task Force on Climate-related Financial Disclosures (TCFD) was formed in 2015

What is the TCFD?

- TCFD is the Task Force on Climate-related Financial Disclosures.
- Formed in 2015 by the G20's Financial Stability Board (FSB)
- The FSB recognized the growing risk from climate change to the financial sector to the tune of trillions of dollars.
- Investors need a disclosure framework that informs them of climate risks to investees, allowing for informed capital allocation decisions.

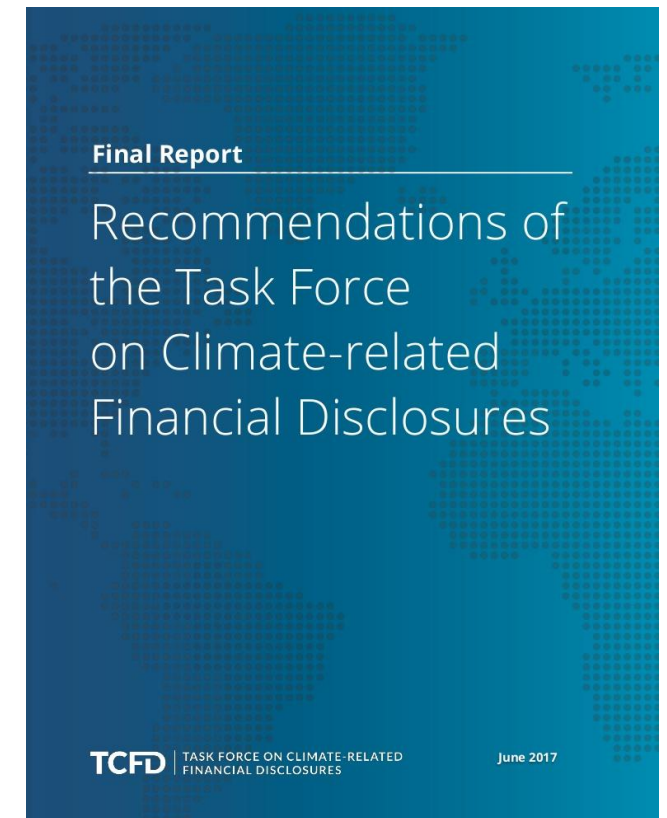
2000+ Companies Worldwide Support the TCFD Framework



The TCFD is a framework for disclosing future-looking climate-related risks and opportunities

What did the TCFD do?

- The TCFD produced final recommendations in 2017.
- TCFD disclosure framework is:
 - Voluntary (for now) and adoptable by all organizations;
 - Designed to solicit decision-useful, forward-looking information on financial impacts; and
 - Focused on risks and opportunities related to transition to lower-carbon economy.



The TCFD framework recommends disclosing across four core elements...



Four Core Disclosure Elements

Governance

- The organization's governance around climate-related risks and opportunities

Strategy

- The actual and potential impacts of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning

Risk Management

- The processes used by the organization to identify, assess, and manage climate-related risks

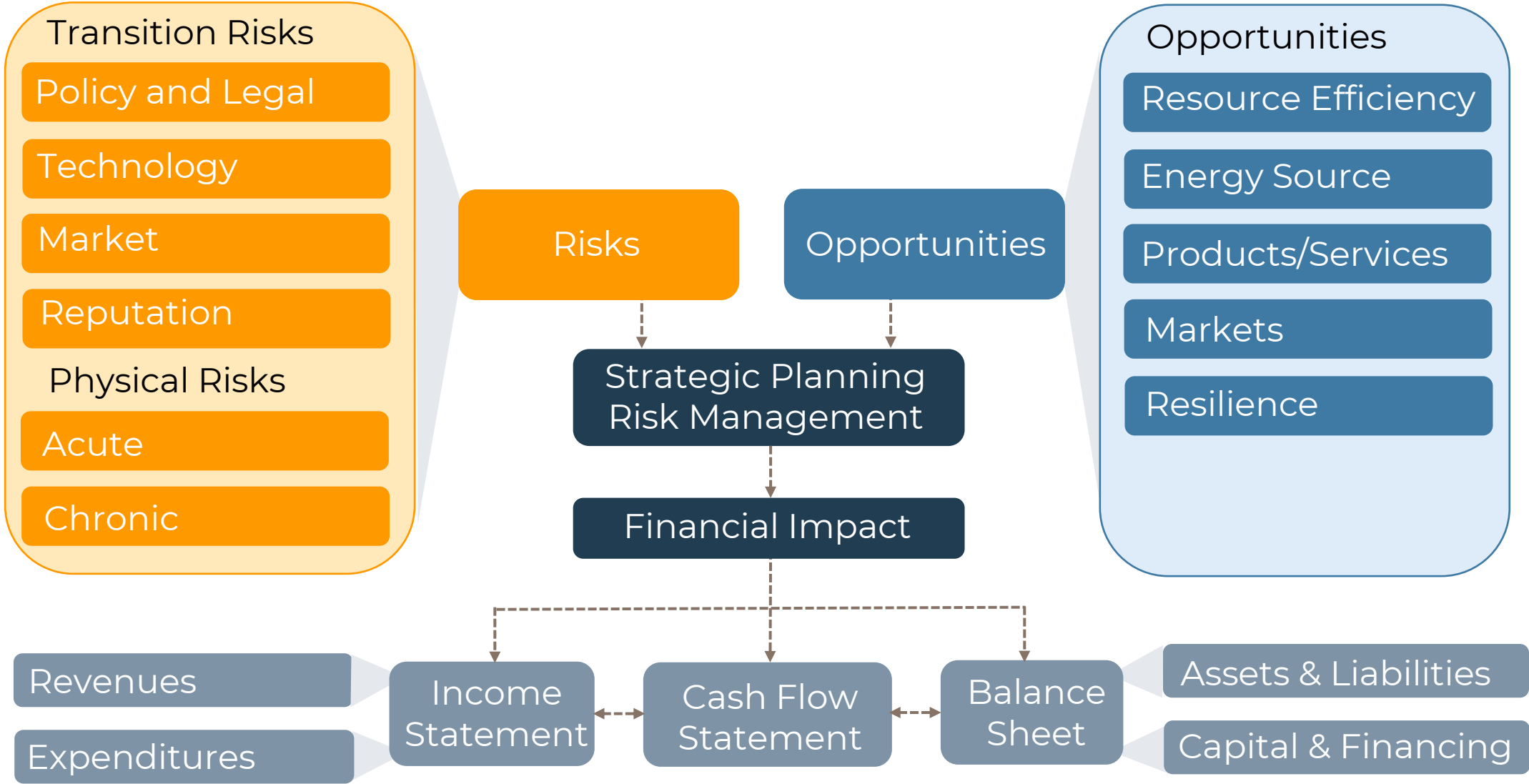
Metrics and Targets

- The metrics and targets used to assess and manage relevant climate-related risks and opportunities

...and 11 recommended disclosures

Governance	Strategy	Risk Management	Metrics and Targets
<p>Disclose the organization's governance around climate-related risks and opportunities.</p>	<p>Disclose the actual and potential impacts of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning where such information is material.</p>	<p>Disclose how the organization identifies, assesses, and manages climate-related risks.</p>	<p>Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.</p>
Recommended Disclosures			
<ul style="list-style-type: none"> a. Describe the board's oversight of climate-related risks and opportunities. b. Describe management's role in assessing and managing climate-related risks and opportunities. 	<ul style="list-style-type: none"> a. Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term. b. Describe the impact of climate-related risks and opportunities on the organization's business, strategy, and financial planning. c. Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario. 	<ul style="list-style-type: none"> a. Describe the organization's processes for identifying and assessing climate-related risks. b. Describe the organization's process for managing climate-related risks. c. Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management. 	<ul style="list-style-type: none"> a. Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process. b. Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks. c. Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.

The TCFD framework targets both climate-related risks and opportunities now and into the future



WSP takes a phased approach to help organizations align with the TCFD

Since TCFD's inception in 2015, we have partnered with clients across sectors and industries to provide technical and strategic support. We leverage our domain expertise to support clients ESG priorities and have successfully developed sustainable and resilient business strategies to meet investor demands.



Discover

- Gap Analysis and Peer Benchmarking
- Stakeholder Interviews
- TCFD Roadmap Design



Transform

- Climate Integration and Implementation
- Climate Intelligence and Strategic Foresight
- Continual Improvement



Assess

- Hotspot and Scenario Analysis
- Adaptive Capacity and Resilience Assessment
- Materiality Assessment



Plan

- Goals, Metrics and Target Setting
- Strategic Planning
- Reporting and Disclosure

Our global TCFD experience and services can help enhance an organization's overall sustainability and resilience. Our TCFD services are conducted in alignment with the Final Report: *Recommendations of the Task Force on Climate-related Financial Disclosures (June 2017)* and in partnership with our clients.

An aerial photograph of a vast, winding river system, likely the Amazon or a similar large-scale waterway. The river is a deep blue-grey color, meandering through a dense, lush green forest. The forest covers the banks and numerous islands of varying sizes. The perspective is from a high angle, looking down at the river as it flows towards the horizon. The sky is a pale, clear blue. The overall scene is one of a large, natural, and undisturbed ecosystem.

Key Trends

Infrastructure will face unexpected challenges

- Design process should use forward-looking data in addition to historical data
- Include potential climate change impacts in standards for building, drainage, energy efficiency
- Design to resilient standards such as FORTIFIED

Miami Herald

Octopus in the parking garage is climate change's canary in the coal mine



1. <https://www.miamiherald.com/news/local/community/miami-dade/miami-beach/article115688508.html>

Planning for expansion of flood hazard zones and wildfire hazard zones

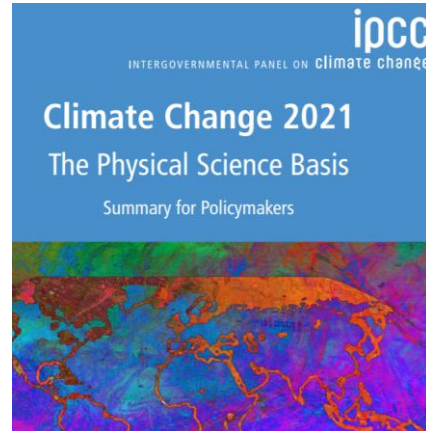
- Exercising caution when developing at the wildland-urban interface
- Evaluating future sea level rise/storm surge impacts for coastal projects
- For brownfield developments, can sea level rise, heavier rainfall and/or drought events compromise remediation measures?



<https://www.iccsafe.org/building-safety-journal/bsj-hits/austin-approves-new-building-codes-to-protect-against-wildfire/>

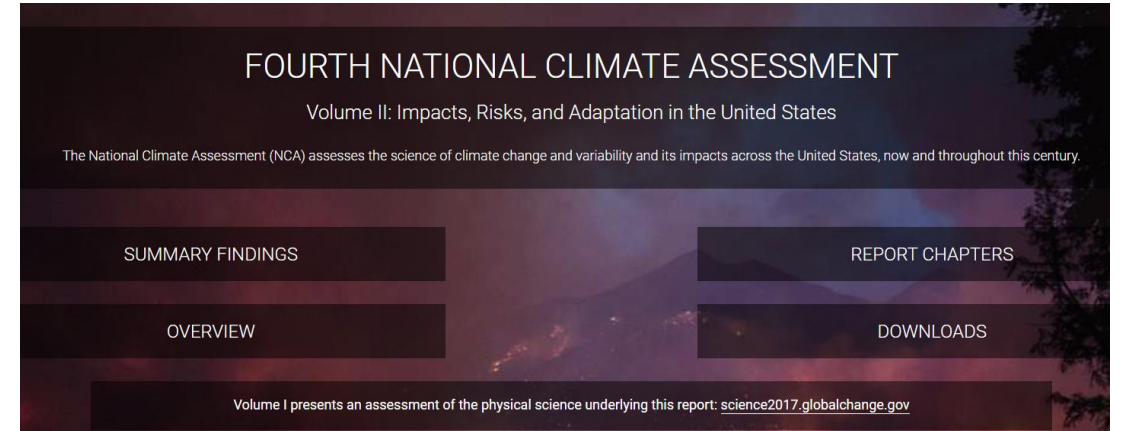
Increasing availability of climate change information

Global Climate Change



<https://www.ipcc.ch/>

US Climate Change



<https://nca2018.globalchange.gov/>

Climate Change in California



<https://cal-adapt.org/>

Asset-level and Community Resilience

- Resilience, renewables, backups to manage power interruptions
- Need to look beyond the particular asset and address resilience of key infrastructure and surrounding communities
- Consider equity in climate adaptation and the just transition

Manhattan after Hurricane Sandy



Photo credit: Eduardo Munoz/Reuters

Looking ahead

- More frequent integration of climate considerations into RFPs
- Suppliers to Federal/government agencies can demonstrate their own resilience and can enhance the resilience of their services
- Suppliers may derive a competitive advantage from being a truly sustainable and resilient vendor (transparency through active disclosure and reporting)
 - *Avoid greenwashing*
- Adaptation + mitigation nexus is key
 - *Construction space companies often focus more on hazards and less on sustainability*
 - *Taking time to understand a client's mission and where they want to be in a few years is part of developing sustainability policy and can strengthen client relationship*

An aerial photograph of a vast, winding river system, likely the Amazon or a similar large-scale waterway. The river is a deep blue-grey color, meandering through a dense, lush green forest. The forest covers the banks and numerous islands and peninsulas of varying sizes. The perspective is from a high angle, looking down at the river as it flows towards the horizon. The sky is a pale, hazy blue, suggesting a clear but slightly overcast day. The overall scene conveys a sense of a large, interconnected natural ecosystem.

Our Approach

We take pride in advancing our own sustainability and resilience*



Achieved an “A-” for response to CDP Climate Change Questionnaire Score



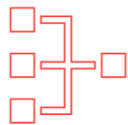
Named “Most Sustainable Company in the Engineering Industry” by *World Finance* magazine



Became a signatory to the United Nations Global Compact (UNGC)



Became first professional services firm to sign sustainability-linked credit terms in the Americas



Continued our alignment with the TCFD recommendations

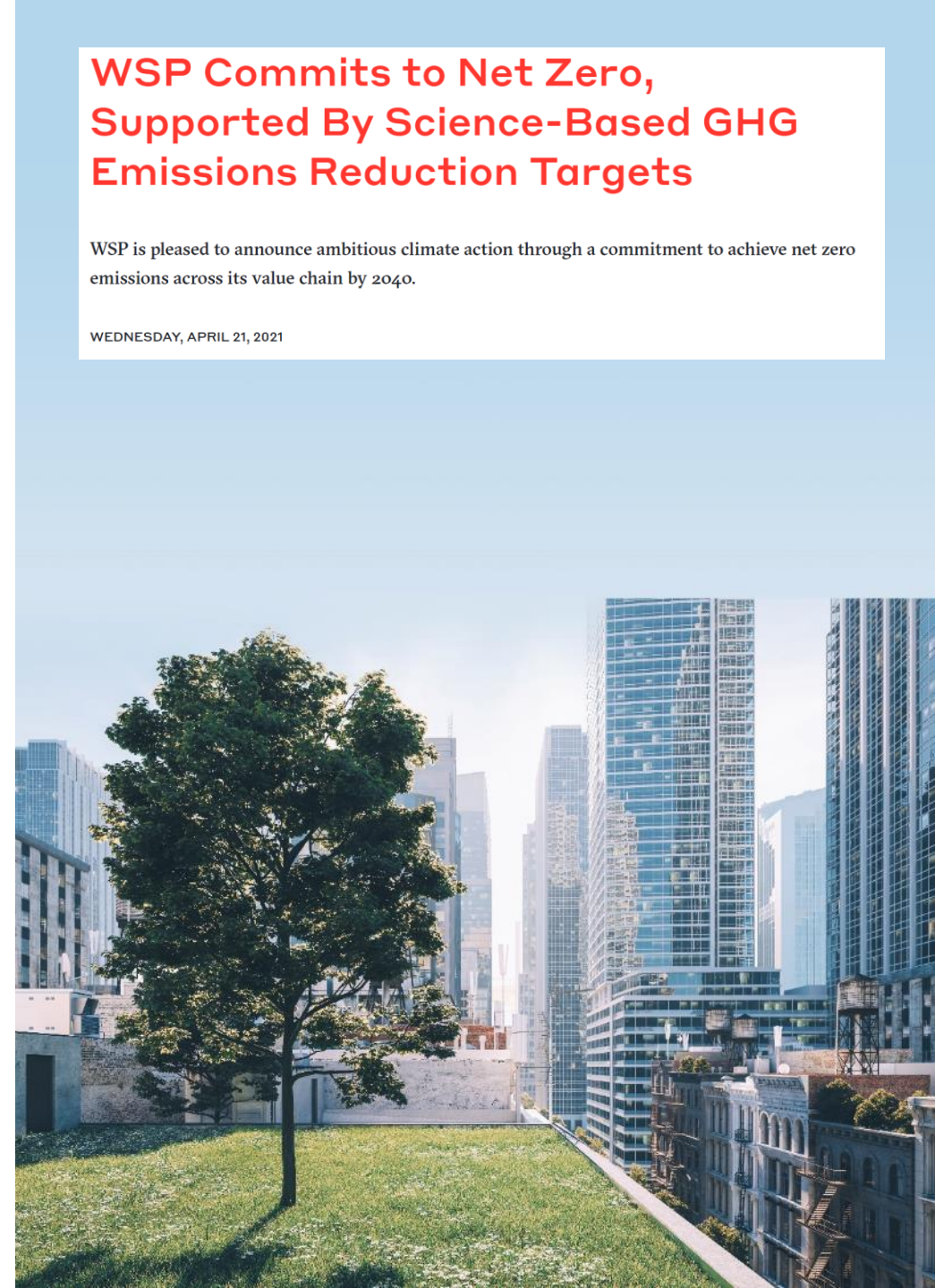


Became the first Transform level organizational member of ASAP

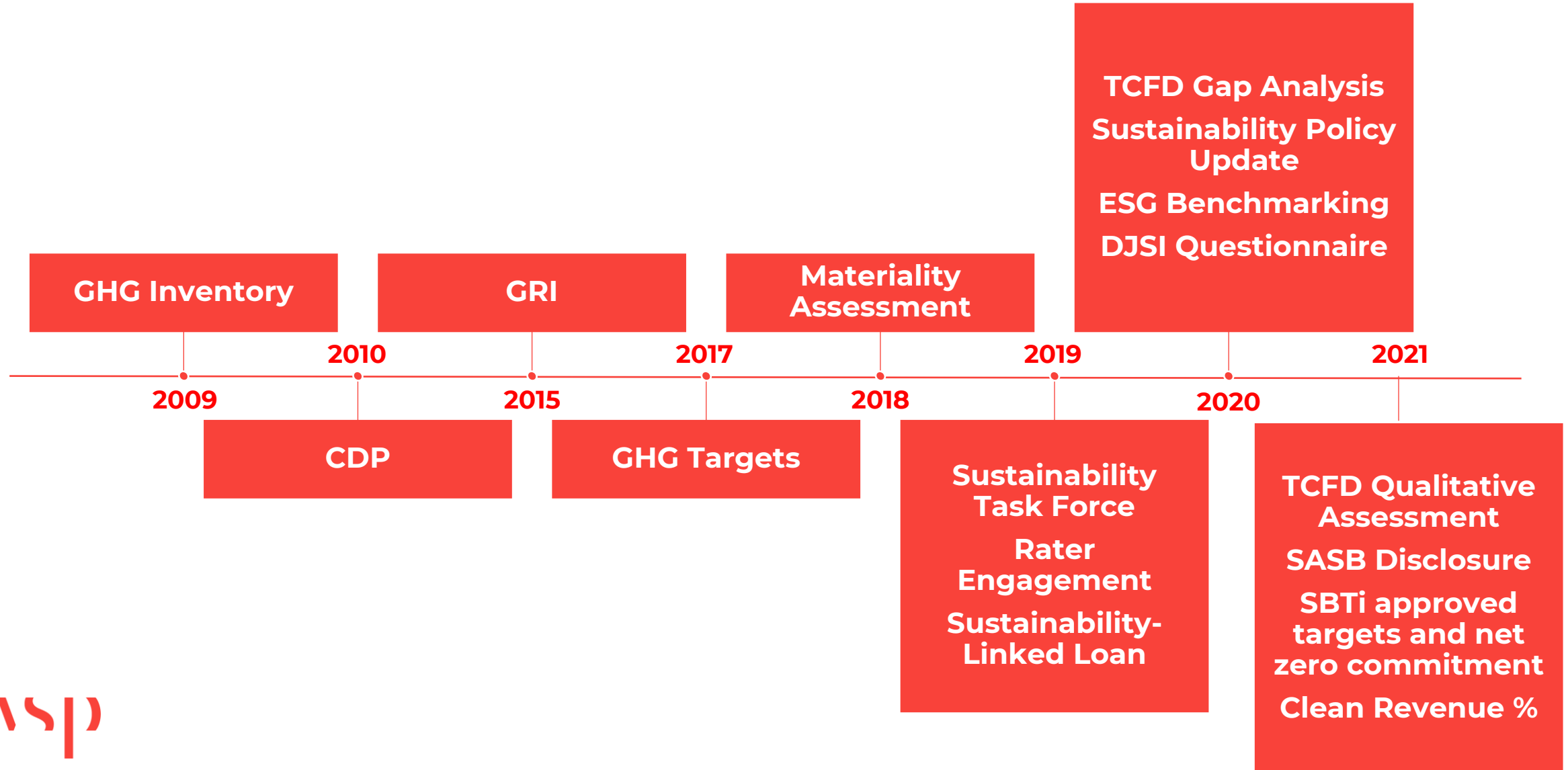
WSP Commits to Net Zero, Supported By Science-Based GHG Emissions Reduction Targets

WSP is pleased to announce ambitious climate action through a commitment to achieve net zero emissions across its value chain by 2040.

WEDNESDAY, APRIL 21, 2021



WSP's Sustainability and Resilience Journey



An aerial photograph of a vast, winding river system, likely the Mississippi River Delta, characterized by numerous forested islands and peninsulas. The water is a deep blue-grey, and the surrounding land is covered in dense, vibrant green forest. The perspective is from a high angle, looking down on the intricate network of waterways and landmasses.

We're all in this together!



Silicon Valley Transit Consultants

1742 North First Street, Suite 400

San José, California 95112

Strategic
Partnership



TO REGISTER with VTA go to:

<https://www.vta.org/business-center>

TO GET CERTIFIED go to: <https://www.vta.org/business-center/business-diversity-programs> **for online application**

NEXT BAY AREA DIVERSITY BUSINESS FORUM

Bechtel: Engineering, Construction & Project Management

Noon-1:30pm November 9

Register at: <https://tinyurl.com/BayAreaDBF-November>

NEXT MENTOR PROTEGE WORKSHOP #8

Noon, Nov 11

Topic: Follow the Money: Future Infrastructure Funding and Impact on Transportation

Register at <https://tinyurl.com/MPWorkshop8>

QUESTIONS CONTACT: Olga Medina
olga.medina@vta.org 408-321-7534