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| Module 1: Case for change                  | • SBTi Financial Sector Science-Based Targets Guidance (Feb 2022)  
  • GFANZ Recommendations and Guidance on Net-zero Transition Plans for the Financial Sector (Jun 2022)  
  • GFANZ net-zero Financing Roadmaps (Nov 2021)  
  • Bain & Company Brief – Banks’ Great Carbon Challenge (Jun 2022)  
| Module 2: Voluntary finance climate action ecosystem | • SBTi Financial Sector Science-Based Targets Guidance (Feb 2022)  
  • SBTi Business Ambition for 1.5C (Nov 2021)  
  • SBTi 2021 Progress Report |
| Module 3: Developing SBTs: Overview        | • SBTi Financial Sector Science-Based Targets Guidance (Feb 2022)  
  • GFANZ Recommendations and Guidance on Net-zero Transition Plans for the Financial Sector (Jun 2022)  
  • UN Global Compact Academy Setting Science-Based Targets E-Learning  
  • UN Global Compact Academy Net-Zero Standard E-Learning |
| Module 4: Developing SBTs: Scope 1, scope 2, and Scope 3 operational emissions | • SBTi Financial Sector Science-Based Targets Guidance (Feb 2022)  
  • SBTi Target Setting Tool 2.0 (Dec 2021)  
  • GHG Protocol Corporate Accounting and Reporting Standard (Revised)  
  • GHG Protocol Scope 2 Guidance (Sep 2015)  
  • GHG Technical Guidance for Calculating Scope 3 Emissions 1.0 (2013) |
| Module 5: Developing SBTs: Scope 3 financed emissions – Overview | • SBTi Financial Sector Science-Based Targets Guidance (Feb 2022)  
  • GHG Technical Guidance for Calculating Scope 3 Emissions 1.0 (2013)  
  • PCAF The Global GHG Accounting and Reporting Standard for the Financial Industry 1.0 (Nov 2020) |
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| Module 6: Developing SBTs: Scope 3 financed emissions – Calculation deep dive and case studies | • SBTi Financial Sector Science-Based Targets Guidance (Feb 2022)  
• GFANZ Recommendations and Guidance on Net-zero Transition Plans for the Financial Sector (Jun 2022)  
• PCAF The Global GHG Accounting and Reporting Standard for the Financial Industry 1.0 (Nov 2020)  
• CDP & WWF Temperature Rating Methodology (Oct 2020)  
• Bain & Company Brief – Banks’ Great Carbon Challenge (Jun 2022) |
| Module 7: Developing SBTs: Scope 3 financed emissions – Data considerations and trade-offs | • SBTi Financial Sector Science-Based Targets Guidance (Feb 2022)  
• GFANZ Recommendations and Guidance on Net-zero Transition Plans for the Financial Sector (Jun 2022)  
• PCAF The Global GHG Accounting and Reporting Standard for the Financial Industry 1.0 (Nov 2020)  
• Bain & Company Brief – Banks’ Great Carbon Challenge (Jun 2022) |
| Module 8: Validating, disclosing, and recalculating | • SBTi Target Submission Form for Financial Institutions  
• SBTi Booking System  
• SBTi Financial Sector Science-Based Targets Guidance (Feb 2022)  
• GFANZ Recommendations and Guidance on Net-zero Transition Plans for the Financial Sector (Jun 2022)  
• PCAF The Global GHG Accounting and Reporting Standard for the Financial Industry 1.0 (Nov 2020)  
• GHG Protocol Scope 3 Accounting Standards (Apr 2013) |
| Module 9: Governance, change management, and meeting targets | • GFANZ Recommendations and Guidance on Net-zero Transition Plans for the Financial Sector (Jun 2022)  
• SBTi Financial Sector Science-Based Targets Guidance (Feb 2022) |
Module #1: Case for change

SBTi financial institution training
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Key learning objectives

After completing this module, individuals will be able to...

- Explain urgency and nuances around global clean energy revolution
- Plan for key changes required for the net-zero transformation
- Articulate business case for being a net-zero transformation leader
Carbon dioxide emissions have nearly doubled since 1975

- Greenhouse gas (GHG) effect is the natural warming of the earth when gases trap the sun’s heat in the atmosphere.
- However, in the last century, human activities have caused increasingly high concentrations of GHG, which is trapping too much heat.

Source: Global Carbon Project global emissions data (2021); Carbon Brief - Global CO2 emissions have been flat for a decade, new data reveals (Nov 2021)
Many industries are contributing to emissions, without enough sinks to address.

CURRENT SOURCES:
- Electricity Production: ~25%
- Food, Agriculture, & Land Use: ~24%
- Industry: ~21%
- Transportation: ~14%
- Buildings: ~10%
- Other Energy Related Emissions: ~6%

CURRENT SINKS:
- Coastal & Ocean Sinks: ~26%
- Land Sinks: ~17%

~57% Remains in the Atmosphere

Sources: Project Drawdown (2022); Bain & Company analysis
To reach net-zero by 2050, emissions must be halved by 2030

2100 Warming Projections – Emissions and expected warming based on pledges and current policies

GLOBAL GREENHOUSE GAS EMISSIONS (GIGATONNES)

Emissions must decrease 50% by 2030, from a 2010 base, to reach net-zero

Baseline 4.1 – 4.8°C

Policies & action ~2.7°C
2030 targets only ~2.4°C
Pledges and targets ~2.1°C
Optimistic scenario ~1.8°C
1.5°C consistent ~1.3°C

COP26 pledges and targets changed the overall path

From: ~2.4°C
To: ~2.1°C

Note: Baseline estimate from Climate Action Tracker Dec 2018 Update
Source: Climate Action Tracker, November 2021
This will require an energy and land use transition that balances decarbonization and equitable outcomes.

**Clean**
Reduces or eliminates the emission of greenhouse gases through cleaner approaches or better sinks.

**Reliable**
Provides access to energy and agricultural resources at a scale and duration necessary for economic prosperity.

**Affordable**
Enables economically feasible solutions for all nations and consumers.

**Secure**
Ensures uninterrupted supply that is resilient to weather, economic, and political factors.
Stakeholders of all types are calling on companies to act

- **Shareholders**: 77% of investment managers consider it their responsibility to hold companies accountable on climate change & inequality
- **Consumers**: 68% of US consumers are willing to pay more for sustainable brands
- **Regulators**: European Green Deal will make Europe climate neutral by 2050
- **Employees**: 88% of 25-40 year-olds say their job is more fulfilling when they can positively impact social & environmental issues
- **Civil Society**: 40% of people in US would boycott a company for not being eco-conscious

Sources: Natixis 2021 Investment Managers-ESG Survey (Nov 2021); First Insight/Wharton Baker Retailing Center The Sustainability Disconnect Between Consumers & Retail Executives (Jan 2022); European Commission “Fit for 55”: delivering the EU's 2030 Climate Target on the way to climate neutrality (July 2021); World Economic Forum "4 ways for companies to take effective climate action" (Sep 2020); LendingTree ESG survey (Apr 2021)
National net-zero commitments are accelerating, but must be translated into action.

Of commitments translated into law as of Winter / Spring 2022

Source: Bain & Company analysis

<10%
Regulators are increasingly weighing in on climate

**Europe**

Through the *fit for 55 package* in the 2019 *Green Deal*, member nations are obligated to…
- Reach carbon neutrality by 2050
- Reduce emissions by 55% by 2030

**SFDR* Mandates use of EU Taxonomy** reporting on green activities in 2022

Announced climate action plans set to take place between 2022 and 2024…
- Conduct *stress tests* with banks
- Introduce *climate risk disclosure requirements* to credit assessment guidelines

**United States**

Exploring proposal to require registrants to *disclose climate risk exposure and management strategies* in addition to GHG emissions

**Recommend climate risk disclosure standardization** and integration into *stability monitoring*

**Asia**

Aims to require KOSPI-listed* firms *to disclose climate-related risks and GHG data* by 2026

**Endorses K-Taxonomy** for green activity reporting

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Note: Regulator analysis completed in July 2022 and is subject to change; *Sustainable Finance Disclosure Regulation (SFDR); *The Korea Composite Stock Price Index (KOSPI) is the index of all common stocks traded on the Korea Exchange

Financial institutions are key enablers of climate change mitigation

Approx. $32T of net-zero investments required over next decade

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electricity Generation</td>
<td>$32T</td>
</tr>
<tr>
<td>Transport</td>
<td>$16.0</td>
</tr>
<tr>
<td>Buildings</td>
<td>$5.4</td>
</tr>
<tr>
<td>Industry</td>
<td>$5.2</td>
</tr>
<tr>
<td>Low Emissions Fuels</td>
<td>$2.2</td>
</tr>
<tr>
<td>Agriculture and Land Use</td>
<td>$1.5</td>
</tr>
</tbody>
</table>

Approx. 80% projected to take place in Asia, Europe, & N. America

- N. America: $5.9T
- Europe: $6.6T
- Asia Pacific: $13.6T
- Africa: $1.7T
- C. & S. America: $1.5T
- Middle East: $1.2T
- Eurasia: $0.9T
- ROW: $0.6T

Note: See GFANZ net-zero Financing Road Maps Methodology for regional groupings; ROW represents Small Island Developing States and investment opportunities not allocated to any specific region.

Sources: GFANZ net-zero Financing Roadmaps (Nov 2021)
Financing the net-zero transformation will occur over time and does not require an immediate, overnight divestiture.

Leading the clean energy revolution involves ...

**Near-term actions**

1. **Commit** to setting **decarbonization ambition and targets**

2. **Measure, track, & disclose** decarbonization progress

**Long-term, sustained activities**

3. **Set ESG strategy**, with investments in greener assets

4. Actively **engage clients** to transform and reduce emissions

5. **Improve data accuracy** and **availability**

**Individual FI portfolios may shift gradually**

<table>
<thead>
<tr>
<th>FI Portfolio AUM make-up</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Green Assets</td>
</tr>
<tr>
<td>100%</td>
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</tbody>
</table>

**ILLUSTRATIVE**

FI portfolio **achieved decarbonization ambitions by**...

- Investing in green assets
- Decarbonizing traditional assets

**FI portfolio avoided significant divestitures by acting early**

Note: Illustrative portfolio represents a “Pioneer” example; “Pioneer” financial institutions represent those with early, strong commitment to climate mitigation. Please review Bain & Company’s Banks’ Great Carbon Challenge brief for more details.

Sources: Bain & Company Brief – Banks’ Great Carbon Challenge (Jun 2022)
The clean energy transformation will impact financial institutions’ products, engagement, and operations

Setting SBTs helps companies make the following possible...

<table>
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<tr>
<th>Product &amp; Services</th>
<th>Engagement</th>
<th>Operations</th>
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<tr>
<td><strong>Expand offerings</strong> – offer advisory services, expanded climate mitigation financial products, pricing, etc.</td>
<td><strong>Redefine long-term</strong> – transformation will extend past existing “long-term” plans and require flexible strategy</td>
<td><strong>Embed decarbonization into the business</strong> – including KPIs, financial controls, and investments in greener assets</td>
</tr>
<tr>
<td><strong>Improve data practices</strong> – require relevant emissions data for new engagements and increase quality in existing ones</td>
<td><strong>Reimagine client engagement</strong> – develop concrete mechanisms to engage and escalate on decarbonization efforts</td>
<td><strong>Open aperture on coalition engagement</strong> – partner with peers and policymakers to effect change</td>
</tr>
</tbody>
</table>

**Sources:**  
SBTi Financial Sector Science-Based Targets Guidance (Feb 2022, pgs. 102-108); GFANZ Recommendations and Guidance on Net-zero Transition Plans for the Financial Sector (Jun 2022, pgs. 27-28, 42-43, 48-49, 65-67, 87); Bain & Company
**Advantages for Pioneers**

- Early exposure to growing industries
- Optimal phasing of transformation
- Industry and media recognition
- Input with climate regulators
- Long-term growth in profitability

**Disadvantages for Laggards**

- Prolonged exposure to declining industries
- Last-minute, forced divestures
- Poor industry recognition
- Immature capabilities
- Missed returns with an inability to recover

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**Types of approaches**

<table>
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<tr>
<th>Pioneer</th>
<th>Follower</th>
<th>Laggard</th>
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<td>Undertakes climate mitigation, lacks speed and aggression</td>
<td>Takes a delayed, passive approach</td>
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Source: Bain & Company Brief – Banks’ Great Carbon Challenge (Jun 2022)
Early studies show that FIs who act early may reap significant benefits

### Types of approaches

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### Profit growth, 100=2021

- **Pioneer starting to differentiate**
- **Greater differentiation of pioneer and laggard strategies**
- **Follower catching up, laggard increasingly penalized**

**Profit growth, 2021-2050**
- 25% to 30%
- 5% to 10%
- -10% to -20%

Source: Bain & Company Brief – Banks’ Great Carbon Challenge (Jun 2022)
However, significant questions and challenges remain

- **What role should the financial sector play** (vs. policy) in transforming the economy?

- **Which actions will be mandated by regulators**, and which will continue to be voluntary?

- **How central does decarbonization have to be** to strategy for firms to succeed?

- **How to quantify the opportunities and benefits of investing early** in climate mitigation?

- **What benefit can targets and commitments provide** when data is still limited?
Key takeaways

• GHG emissions must be halved by 2030 and brought to net-zero by 2050 to limit warming to 1.5°C and minimize the most severe impacts of climate change

• FIs have a unique opportunity to enable, support, and track decarbonization

• Transforming to a 1.5°C aligned global economy will require both near-term capability-building and long-term strategy to secure a decarbonized future

• Pioneers may benefit from increased profitability, industry recognition, and higher quality green portfolios in the medium- and long-term
THANK YOU FOR LISTENING