



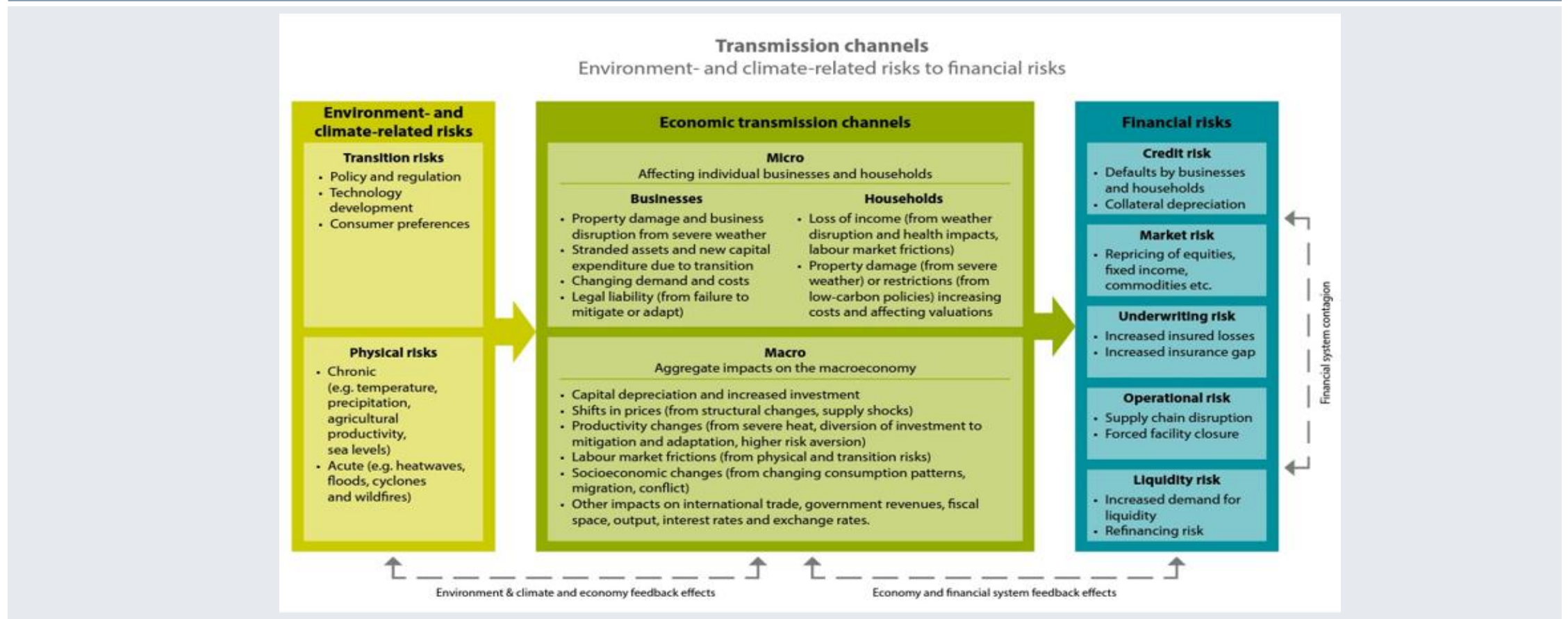
April 2024

Overview of assistance to financial institutions in navigating sustainability risks

— GHG emissions & financial risks

Climate risks are financial risks¹ (1/2)

How climate risks translate to financial risks¹



1) [NGFS, 2021](#)

Climate risks are financial risks (2/2)

Potential effects of climate change on traditional financial risks¹

Risk Categories	Potential effects of climate risk drivers (physical and transition risks)
Credit risk	Credit risk increases if climate risk drivers reduce borrowers’ ability to repay and service debt (income effect) or banks’ ability to fully recover the value of a loan in the event of default (wealth effect).
Market risk	Reduction in financial asset values, including the potential to trigger large, sudden and negative price adjustments where climate risk is not yet incorporated into prices. Climate risk could also lead to a breakdown in correlations between assets or a change in market liquidity for particular assets, undermining risk management assumptions.
Liquidity risk	Banks’ access to stable sources of funding could be reduced as market conditions change. Climate risk drivers may cause banks’ counterparties to draw down deposits and credit lines.
Operational risk	Increasing legal and regulatory compliance risk associated with climate-sensitive investments and businesses.
Reputational risk	Increasing reputational risk to banks based on changing market or consumer sentiment.

1) [BIS, 2021](#)

GHG emissions influence financial risks (1/2)

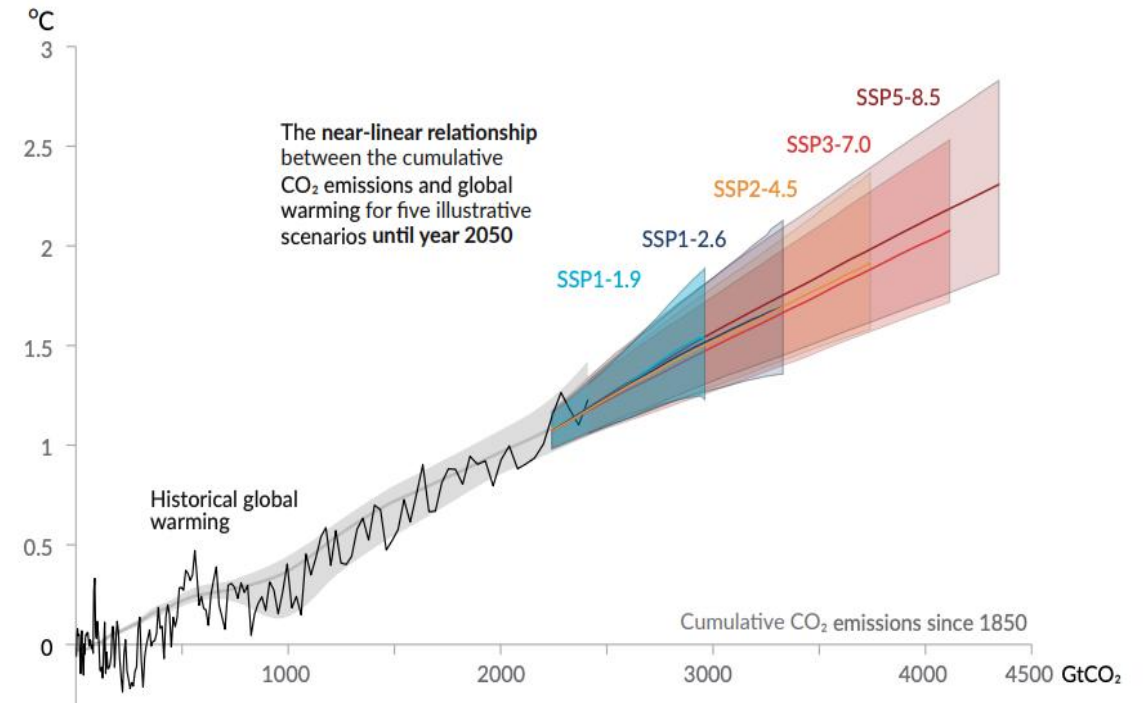
- Higher emissions lead to climate change → higher physical risks¹ → higher financial risks

- Swiss Re's data on total economic and insured losses from natural catastrophes²

	2021 (US\$ billion, 2021 prices)	2000 (US\$ billion, 2021 prices)	Annual Change (%)
Total Losses	270	217	33%
Insured Losses	111	90	23%

Every tonne of CO₂ emissions adds to global warming

Global surface temperature increase since 1850–1900 (°C) as a function of cumulative CO₂ emissions (GtCO₂)

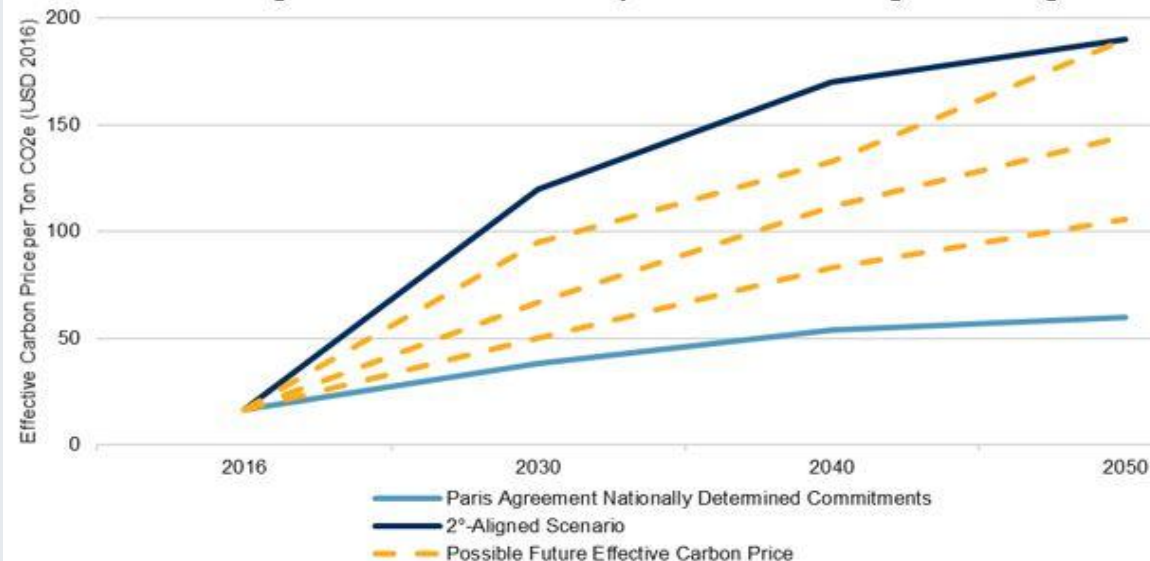


1) IPCC, 2021; 2) Swiss Re, 2022

GHG emissions influence financial risks (2/2)

- The more **abrupt and extensive emissions are reduced** → higher transition risks^{1, 2} → higher financial risks
- Research by European Central Bank found **negative relationship** between **GHG emissions / intensities** & **credit ratings**³
- Major global companies could face up to 283 USD billion carbon pricing costs and 13% earnings at risk by 2025⁴

Exhibit 1: Global Average Carbon Price Scenario Analysis to Meet 2°C Paris Agreement Target



Source: IEA and IRENA (2017); Trucost Analysis. Data as of June 2017. Chart is provided for illustrative purposes.



1) NGFS, 2024; 2) BIS, 2023; 3) ECB, 2021; 4) S&P, 2024;

Case studies: Scope 3 emissions reporting

Case study 1: Forvia's Scope 3 emissions reporting

Example disclosure of Scope 3 emissions ¹

		2019 baseline		2021		2022		Level of uncertainty		
		Faurecia	FORVIA	Faurecia	FORVIA	Faurecia	FORVIA			
Scope 3	Controlled	Upstream	Purchased goods and services	6,218,000	8,102,000	5,227,000	7,103,000	6,502,000	8,177,000	medium
			Capital goods	389,000	614,000	253,000	530,000	304,000	573,000	high
			Fuel & energy related emissions	245,000	359,000	208,000	319,000	203,000	302,000	low
			Upstream transport and distribution	783,000	944,000	909,000	1,094,000	1,079,000	1,262,000	medium
			Wastes generated	186,000	202,000	121,000	134,000	119,000	141,000	medium
			Business travel	68,000	76,000	18,000	20,000	42,000	50,000	medium
			Employee commuting	176,000	230,000	137,000	179,000	175,000	209,000	medium
	Downstream	Upstream leased assets	50,000	58,000	54,000	62,000	58,000	65,000	medium	
		Downstream transport and distribution	118,000	167,000	112,000	168,000	127,000	183,000	medium	
		Processing of sold products	85,000	278,000	73,000	239,000	81,000	275,000	high	
		Products end of life	228,000	681,000	219,000	668,000	331,000	682,000	medium	
		Downstream leased assets							N/A	
		Franchises							N/A	
		Investments	23,000	96,000	23,000	80,000	26,000	65,000	medium	
SCOPES 1, 2 AND CONTROLLED SCOPE 3 (EXCLUDING THE USE OF PRODUCTS)			9,432,000	13,012,000	8,053,000	11,631,000	9,646,000	12,814,000	MEDIUM	

		2019 baseline		2021		2022		Level of uncertainty
		Faurecia	FORVIA	Faurecia	FORVIA	Faurecia	FORVIA	
Uncontrolled	Use of products sold in the car	19,240,000	23,776,000	14,029,000	18,148,000	18,627,000	22,817,000	medium
	SCOPE 3 TOTAL	27,809,000	35,583,000	21,383,000	28,744,000	27,674,000	34,801,000	MEDIUM
	SCOPES 1, 2 AND 3 TOTAL	28,672,000	36,788,000	22,082,000	29,779,000	28,273,000	35,631,000	MEDIUM

1) Forvia, 2022

Case study 2: NatWest's Scope 3 emissions reporting

A bank's approach to accounting for financed emissions¹

Sector	2022				2019				2030
	Scope 1 and 2 (MtCO ₂ e)	Scope 3 (MtCO ₂ e)	Physical emissions intensity	Economic emissions intensity ⁽²⁾	Scope 1 and 2 (MtCO ₂ e)	Scope 3 (MtCO ₂ e)	Physical emissions intensity	Economic emissions intensity	Physical emissions intensity reduction
Residential mortgages	2.8 ⁽¹⁾	-	38.4 kgCO ₂ e/m ² ⁽¹⁾	14 ⁽¹⁾	3.0	-	38.7 kgCO ₂ e/m ²	17	49% ⁽³⁾
Commercial real estate (secured)	0.3 ⁽¹⁾	-	51.5 kgCO ₂ e/m ² ⁽¹⁾	18 ⁽¹⁾	0.4	-	56.0 kgCO ₂ e/m ²	21	60% ⁽³⁾
Housing associations	0.1	-	52.3 tCO ₂ e/£m	6	0.1 ⁽⁸⁾	-	55.5 tCO ₂ e/£m ⁽⁸⁾	6 ⁽⁸⁾	-
Automotive manufacturing ⁽⁵⁾	-	0.5	258.6 gCO ₂ e/v-km	703	-	0.3	260 gCO ₂ e/v-km	1,362	24% ⁽³⁾
Automotive retail ⁽⁵⁾	1.0	-	-	304	0.9 ⁽⁷⁾	-	-	269	-
Transport	0.7	0.6	-	263	0.6	0.7	-	348	-
of which freight road ⁽⁵⁾	0.3	0.3	47.1 gCO ₂ e/t-km	356	0.1	0.2	36.7 gCO ₂ e/t-km	292	19% ⁽³⁾
of which passenger rail ⁽⁵⁾	0.1	0.1	74.3 gCO ₂ e/p-km	251	0.3	0.2	50.6 gCO ₂ e/p-km	976	42% ⁽³⁾
of which passenger road ⁽⁵⁾	0.3	0.2	111.8 gCO ₂ e/p-km	202	0.2	0.3	64.9 gCO ₂ e/p-km	221	31% ⁽³⁾
Aviation	0.7 ⁽¹⁾	-	-	569 ⁽¹⁾	1.8	-	-	2,122	28% ⁽⁴⁾
Electricity generation	0.7 ⁽¹⁾	-	103.7 kgCO ₂ e/MWh ⁽¹⁾	188 ⁽¹⁾	2.4	-	223 kgCO ₂ e/MWh	885	76% ⁽³⁾
Oil and gas	0.2 ⁽¹⁾	0.1 ⁽¹⁾	3.6 tCO ₂ e/TJ ⁽¹⁾	204 ⁽¹⁾	1.7	1.9	4.1 tCO ₂ e/TJ ⁽⁷⁾	736	38% ⁽⁴⁾
Waste	0.2	-	284.2 tCO ₂ e/£m	230	1.0	-	1,164 tCO ₂ e/£m	1,572	-
Agriculture – primary farming	3.4 ⁽¹⁾	-	1,860 tCO ₂ e/£m ⁽¹⁾	886	4.1	-	2,075 tCO ₂ e/£m	1,033	26% ⁽⁴⁾
Manufacturing	1.5	-	105.5 tCO ₂ e/£m	180	1.7 ⁽⁸⁾	-	125.4 tCO ₂ e/£m ⁽⁸⁾	212 ⁽⁸⁾	-
Construction	0.5	-	41.5 tCO ₂ e/£m	139	0.4	-	46 tCO ₂ e/£m	154	-
Retail	1.0 ⁽¹⁾	-	48.3 tCO ₂ e/£m ⁽¹⁾	156 ⁽¹⁾	1.1 ⁽⁸⁾	-	48.4 tCO ₂ e/£m ⁽⁸⁾	168 ⁽⁸⁾	-
Leisure	0.4 ⁽¹⁾	-	53 tCO ₂ e/£m ⁽¹⁾	54 ⁽¹⁾	0.5 ⁽⁸⁾	-	68.2 tCO ₂ e/£m ⁽⁸⁾	67 ⁽⁸⁾	-
Other ⁽⁹⁾	4.0	-	-	51	-	-	-	-	-
Total NatWest Group (excluding AUM)⁽⁶⁾	17.5	1.2	-	54					

Footnotes for this page can be found on the following page.

1) [NatWest, 2023](#)

Introducing UNEP FI Risk Centre

Launch at WEF Annual Meeting Jan 2024 in Davos

“Climate and nature risks are real but often underpriced and overlooked. Climate change is making parts of the world uninsurable. The degradation or collapse of ecosystems is disrupting supply chains, Food producers, for example, could face higher costs as natural pollinators vanish. We know this as UNEP does the horizon watching via the global environmental outlook, the global chemicals outlook, and other key publications.” – [Inger Andersen, Executive Director, UNEP](#) (Access the recorded session [here](#))



***We see the need for a unified risk approach to provide the baseline for unified action.** Following our role supporting the establishment of the TNFD and our earlier work in support of the TCFD we are happy to be rolling out UNEP FI Risk Centre this year. That will address the climate, the nature, the environment and other emerging risks.” (Read our article on WEF [here](#))*



Risk Centre technical programming

A diverse range of activities will engage with peers and experts to develop good practices that advance environmental risk management

	Content sessions	Technical skill-building workshops**	In-depth working groups***
Format	<ul style="list-style-type: none"> Discussions and Q&As with experts and peers on timely topics 	<ul style="list-style-type: none"> Practical guidance for implementation and on best practices 	<ul style="list-style-type: none"> Development of outputs, including guides, tools, and reports
Structure	<ul style="list-style-type: none"> 1 session 	<ul style="list-style-type: none"> 1 - 4 sessions 	<ul style="list-style-type: none"> 4+ sessions
Potential topics and partners*	<ul style="list-style-type: none"> Climate and nature science Regulatory stress tests IEA New Scenario Releases COP 29 Briefing Report on financial users guide to 1.5°C scenarios TPT overview discussion Good practices from the climate financial risk forum Just transition finance Plastic pollution risk overview 	<ul style="list-style-type: none"> Nature-based Solutions, (TBD) Evaluating & using customer transition plans Scenario use cases and applicability, (NGFS) Risk Management, (GARP) Emissions data, (PCAF) Benchmarking credit risk methodologies, (GCD) 	<ul style="list-style-type: none"> Nature and climate scenarios and stress test methodologies Risk tool Demonstrations and development Legal risks incl. greenwashing discussion TNFD implementation support Risk disclosure good practices

*Topics to be confirmed, **In-person sessions will be conducted throughout the year. ***Additional working groups might be added.

High-level overview of our working groups

1. **Disclosures & Reporting Good Practices WG**: Helping financial institutions embark on and enhance disclosure & reporting, incl. implementing IFRS S1 & S2, CSRD/ESRS, GRI, with a focus on risk-related disclosures.
2. **Risk Assessment and Tools WG**: Focusing on risk assessment framework and tools for enviro them.
3. **Stress Testing WG**: Aiming to enhance current practices for environmental stress testing, with a focus on climate stress testing.
4. **TNFD Implementation Support WG**: Building capacity on nature-related risks through the TNFD framework.
5. **Legal Risks WG**: Developing good environmental and social practices in FIs, taking into account existing and emerging regulatory/supervisory/private enforcement actions/other complaints and lessons learned from them.

More about UNEP FI Risk Centre

- Learn more about the UNEP FI Risk Centre at <https://www.unepfi.org/risk-centre/>
- Register here to join the UNEP FI Risk Centre:
<https://forms.office.com/e/hbwsSUYYZ1>
- Email us: unepfi-riskcentre@un.org



Hiu-Yan Cheng
Climate Risk Specialist
UNEP FI Risk Centre
hiu.cheng@un.org