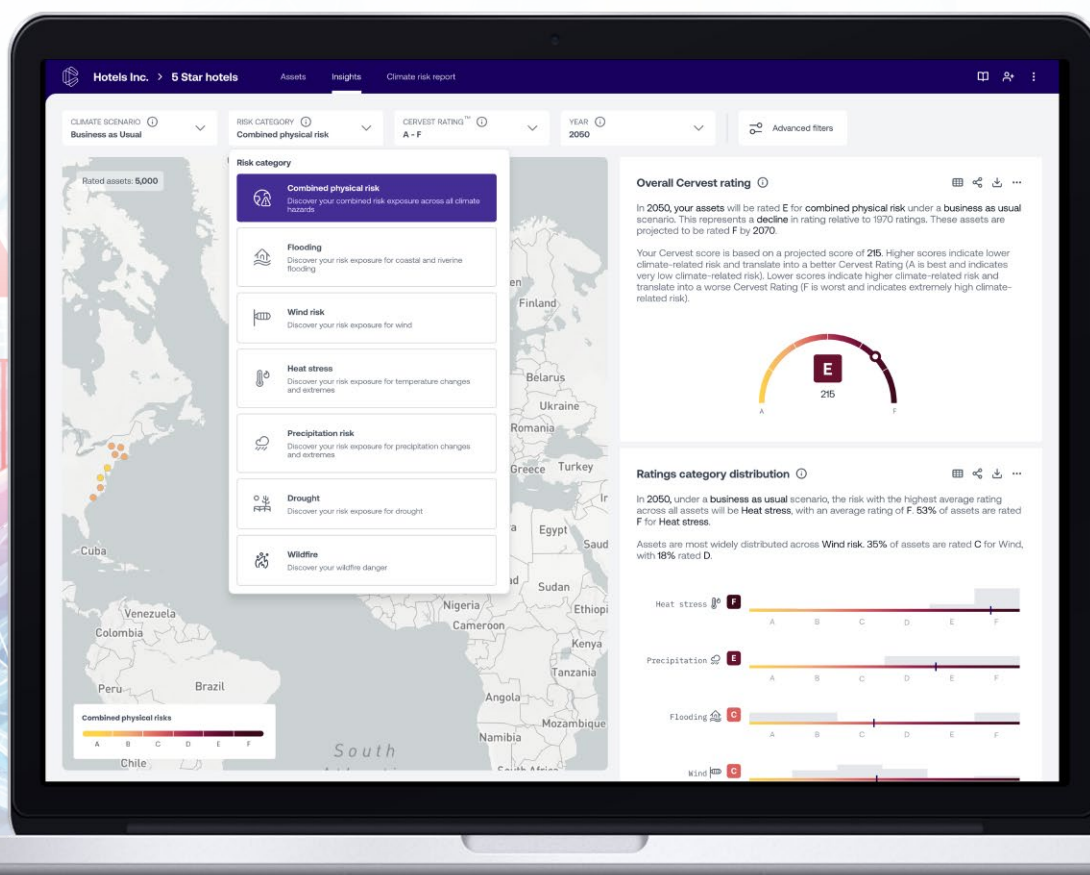# Are you ready for
EU Taxonomy reporting?

From January 2023, financial market participants and companies with more than 500 employees will need to report on how and to what extent their economic activity is sustainable, based on the EU Taxonomy (EUT) regulation.

Take control of your climate risk assessment

The EUT requires eligible companies to assess climate risk across the assets that they own, manage or rely upon, in order to determine whether a business activity makes a substantial contribution to climate adaptation and mitigation objectives.

To help you run this assessment at scale, EarthScan provides on-demand, science-backed insights at the asset and portfolio level across multiple climate hazards, emissions scenarios and time horizons.

How EarthScan helps you meet the EUT requirements

EU Taxonomy (EUT)		EarthScan
Emissions scenarios	"Assessments to be performed using the highest available resolution and state-of-the-art climate projections across the existing range of future scenarios".	**3** IPCC emissions scenarios – Business as Usual – Paris-Aligned – Emissions Peak in 2040
Time horizons	"The climate risk and vulnerability assessment proportionate to the scale of the activity and its expected lifespan … including a minimum of 10 to 30 years in the future for "major investments".	**1970 – 2100** in five-year time steps to cover the entirety of an asset's lifecycle
Hazards and vulnerability	The EU Taxonomy lists four categories of climate hazards. Companies will need to identify which physical climate risks may affect economic performance, and assess the materiality of the physical climate risks on economic activity. It advises that your analysis focuses on "the most important or significant hazards and is designed to guide the user to consider the most salient physical risks".	**10** climate-related risk categories across acute and chronic hazards, including – Combined physical risk – Heat stress – Flooding – Precipitation – Extreme wind – Drought – Wildfire danger – Cold snaps – Water stress (coming 2023) – Landslides (coming 2023) *These risk categories can also be used as risk drivers for other hazards listed within the EUT.*
Resolution and model quality	Climate risk assessments should be performed "using the highest available resolution, state-of-the-art climate projections".	**25km** resolution across all atmospheric risk categories Best-in-class datasets include: – **Selected CMIP6 model data,** with development coordinated and promoted by the World Climate Research Programme – **CORDEX:** climate projections at regional scale – **ERA5:** the fifth generation of ECMWF atmospheric reanalyses of the global climate – **NASA GDDP:** signals contain downscaled data from the NASA Global Daily Downscaled Projections model Coastal flooding: **130m** resolution Riverine flooding: **90m** resolution Best-in-class datasets include: – **Global terrain elevation layers** provided by an in-house digital terrain model – **COAST-RP dataset:** extreme sea levels – **Future sea level change scenarios** from latest IPCC report (provided by NASA) – **Inter-Sectoral Impact Model Intercomparison Project (ISIMIP):** future riverine discharge scenarios – **Global Flood Awareness System (available via Copernicus):** historical riverine discharge data

EU Taxonomy Hazards and Vulnerability

How EarthScan helps you meet the EU Taxonomy physical climate risk and vulnerability assessment

EarthScan's climate hazard insights provide decision-useful insights on the most relevant physical climate risks to the built environment. We help you zero in on the EU taxonomy hazards that matter for the future resilience of your assets.

How EarthScan screens for climate risks

EU Taxonomy hazard coverage

Temperature-related hazards

Screen based on the potential for climate change to increase the probability of asset-level exposure to temperature-related hazards. Estimate asset-level exposure to heatwaves, extreme temperatures and wildfire danger

| Acute | • Heat wave
• Cold wave/frost
• Wildfire |
| Chronic | • Changing temperature (air)
• Heat stress |

Wind-related hazards

Screen based on the potential for direct physical damage to assets due to wind speeds from all wind-related events. Estimate extreme wind speeds during wind-related events accounting for extratropical cyclones, tropical cyclones (hurricanes, typhoons) and tropical storms, including tornadoes (in the USA).

| Acute | • Cyclone, hurricane, typhoon
• Tornado |

Water-related hazards

Screen for flooding-related hazards based on the potential for direct physical damage to assets from flood inundation. We estimate the inundation depths of riverine and coastal flood events for undefended terrain, accounting for sea level rise, storm surges, river flow, and differences in terrain. Screen for other water-related hazards (drought, heavy precipitation, water stress) based on how climate change impacts the probability of asset-level exposure. We screen based on metrics that estimate aridity and extreme precipitation as well as regional maps.

| Acute | • Drought
• Heavy precipitation
• Flood (coastal, fluvial, pluvial*) |
| Chronic | • Precipitation or hydrological variability
• Sea level rise
• Water stress* |

Solid mass-related hazards

Screen for landslide danger, accounting for exposure to precipitation, slope angle and topography (landslide danger describes the conditions that make a landslide dangerous should one occur).

| Acute | • Landslide* |

*in development

Get a headstart on your EU Taxonomy reporting with EarthScan.

Contact charles@cervest.earth to find out more about how EarthScan can help you meet your EU Taxonomy reporting goals.