

# XDI ALIGNMENT WITH 2021 CLIMATE BES (JUNE 2021)



## Physical Risk Stress Testing

CBES REQUIREMENT	XDI OUTPUTS
<b>Scenarios:</b> EPA/LPA (Early/Late Policy Action) NAPA (No Additional Policy Action)	Corresponds directly with: RCP2.6 RCP8.5
<b>Reporting Periods:</b> 2020, 2030, 2050, 2100	All output periods currently available + annual
Summary statistics to cover UK, US, Japan, China, HK, Canada, France, Germany	All geographies currently available
Residential, commercial and counterparties where exposed	Currently available
<b>Peril coverage:</b>	
Flooding	Currently available
Drought/heatwave	Currently available
Severe weather (e.g. convective storm)	Synoptic wind currently available Convective storm available Sept 21 for all geographies
Sea level rise and storm surge	Currently available
Cyclone/hurricane	Available in selected geographies Globally available from Sept 2021
Wildfire	Currently available – Forest Fire
Counterparty analysis to include benchmarking against sectoral (Gross Value Added) GVA paths	Sectoral benchmarking available

## Benchmark Data for Physical Risk Variables

VARIABLES	STATUS
<b>Temperature:</b>	
Near surface temperature: Average Annual (degrees C)	Available at client request
Near-Surface Air Temperature: daily max (degrees C)	Annual Max daily temp used as standard
<b>Rainfall:</b>	
Average summer and winter precipitation rate (% change)	Available at client request
Average daily precipitation rate (% change)	Annual 24 precipitation used as standard
Average annual precipitation rate for central London (% change)	Annual total precipitation used as standard
<b>Windstorm:</b>	
Near-Surface Wind Speed: max daily (% change)	Annual Max of 1 hour sustained wind speed
Near-Surface Wind Speed: max monthly (% change)	Available at client request
Convective	Synoptic wind available as standard. Convective storm available from Sept 2021
Change in tropical cyclone: frequency of Category 4-5 TCs, intensity, and precipitation rates % change	Available in selected geographies Globally available from Sept 2021
<b>Sea Level Rise:</b>	
Sea-Level Rise at the Southend gauge (51.5167N, 0.7333E) Metres against baseline	Available as standard
Sea-Level Rise: average annual Metres against baseline	Available as standard
<b>Agriculture:</b>	
Land area exposed to crop failure: average annual % change	Available at client request
<b>Wildfire:</b>	
Land area exposed to wildfire: average annual % change	Available as standard
<b>Heatwave:</b>	
Land area exposed to heatwave: average annual % change	XDI recommends using Excess Heat Factor days above the 85th percentile to account for regional variations in what temperatures constitute a heatwave sufficient to cause Human Heat Stress Available at client request

## XDI Additional Indicators

VARIABLES	STATUS
<b>Freeze Thaw:</b>	Available as standard
<b>Freshet Flooding :</b> Snowmelt driven seasonal flooding	Available in limited locations
<b>Landslip:</b>	Available in 2022