



Practical Physical Risk Assessment

What You've Learned and
How To Use Your New Knowledge at Work

Jo Paisley and Rohan Hamden

Today's agenda

- ▶ Technical Deep Dive and Regulatory Outlook
- ▶ How did you get on?
- ▶ Share your experience
- ▶ 417 registrants from 56 countries!
- ▶ 1,100 EasyXDI Sessions and 495 reports generated

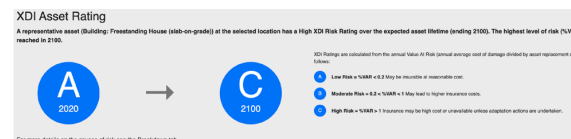
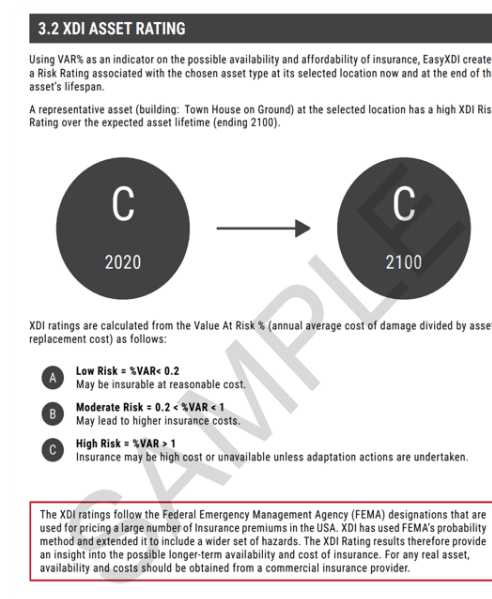
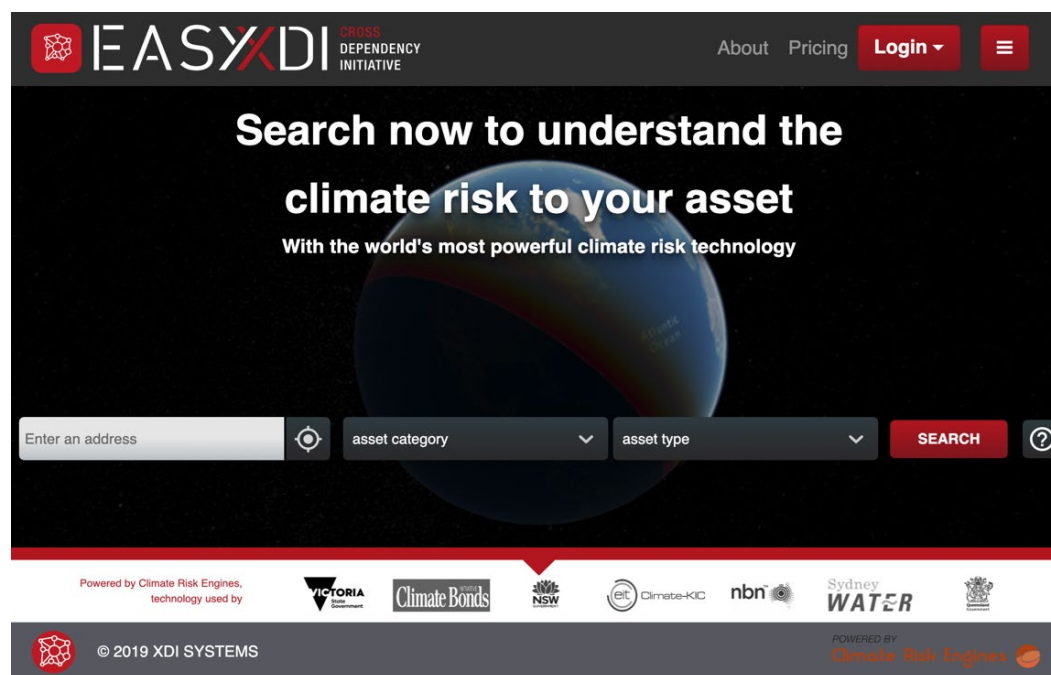


Physical Risk Assessment

Technical Deep Dive and Regulatory Outlook

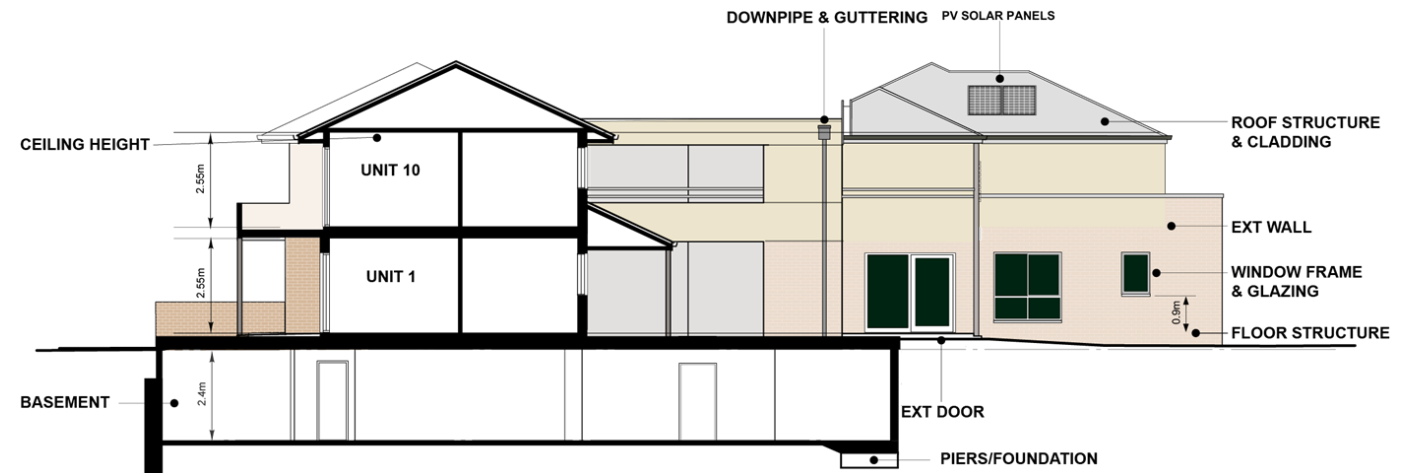
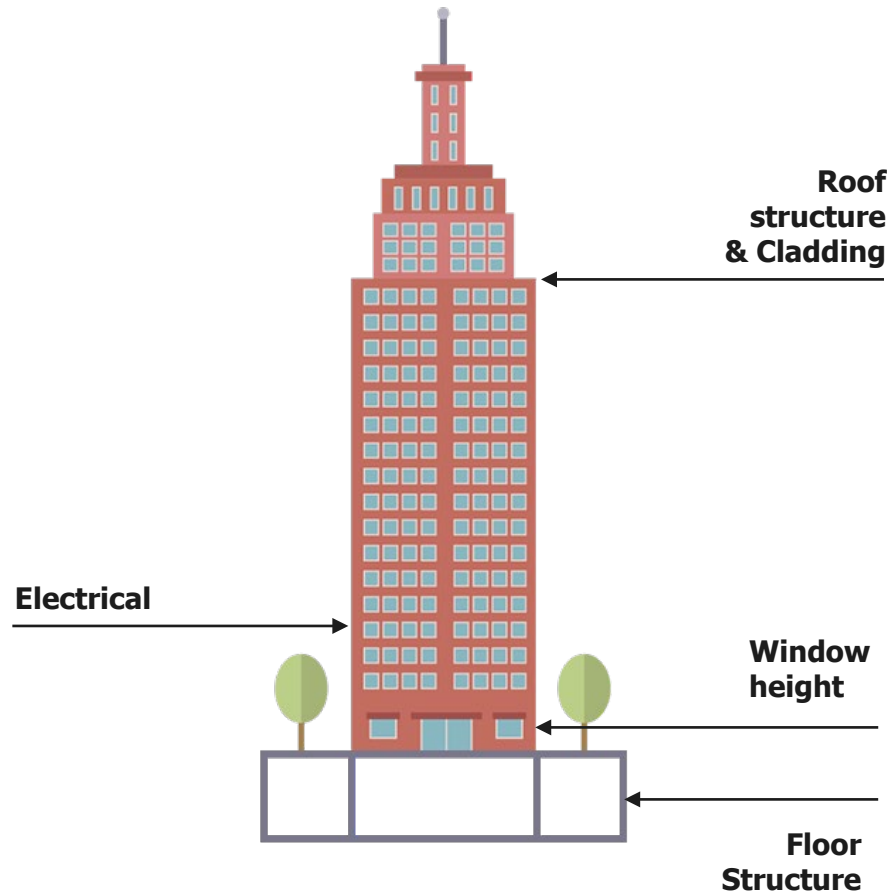
EasyXDI: Test any type of asset, anywhere, from 1990 to 2100

XDI provides a platform to assess the physical climate risk to any type of built asset placed anywhere in the world. Detailed analytics can be viewed online or downloaded as a report.



Average of 100+ users at any time of the day

XDI: The Cross Dependency Initiative – Archetypes



XDI: The Cross Dependency Initiative - Introduction

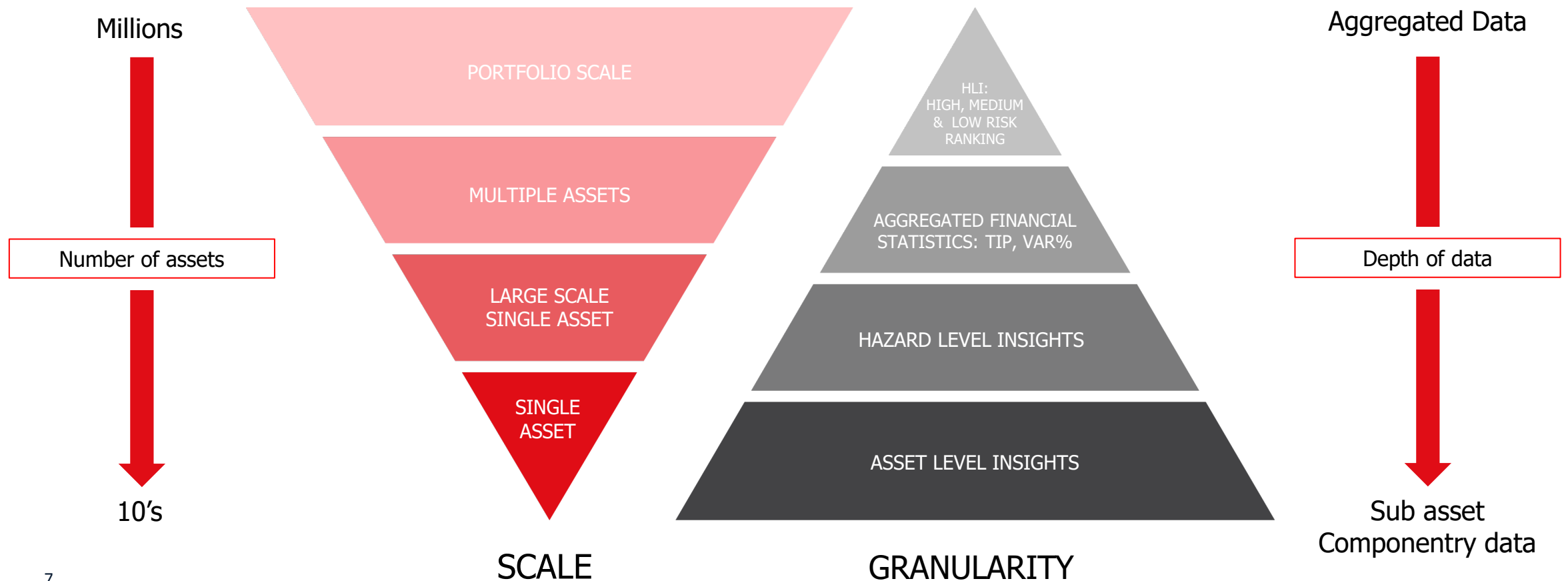
A range of data products are also available to support analysis of large volumes of assets for portfolio and investment purposes.

These can be integrated into external systems for further physical risk analysis and combined where needed with transition analysis provided by XDI approved resellers.



Accessible data from single sites to millions of locations

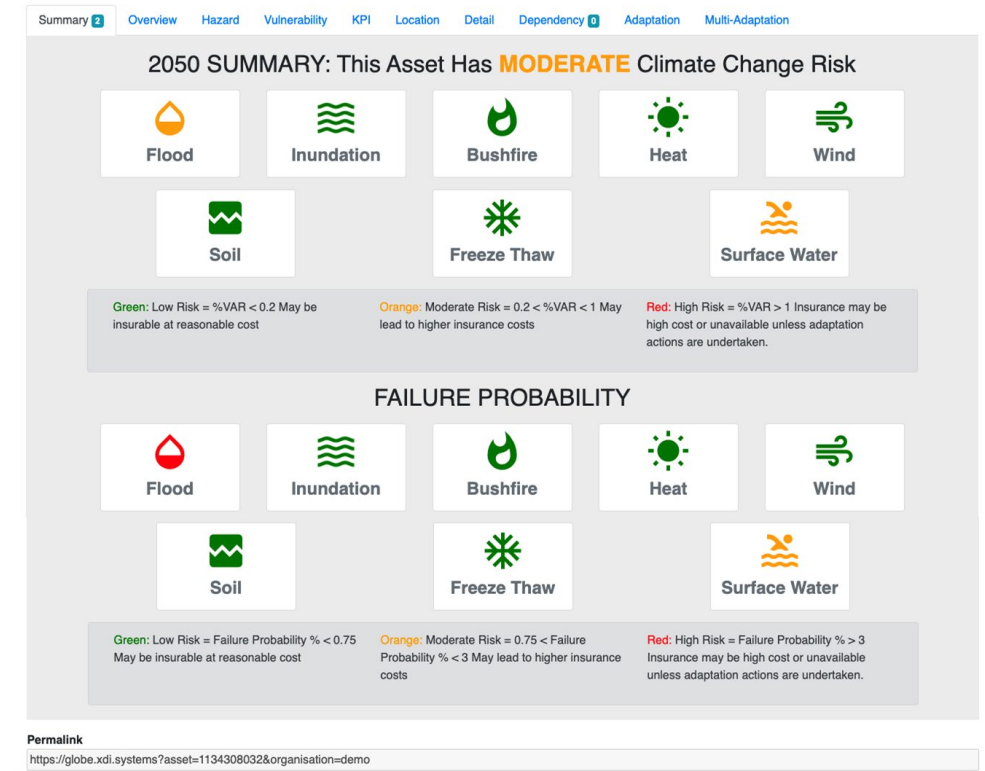
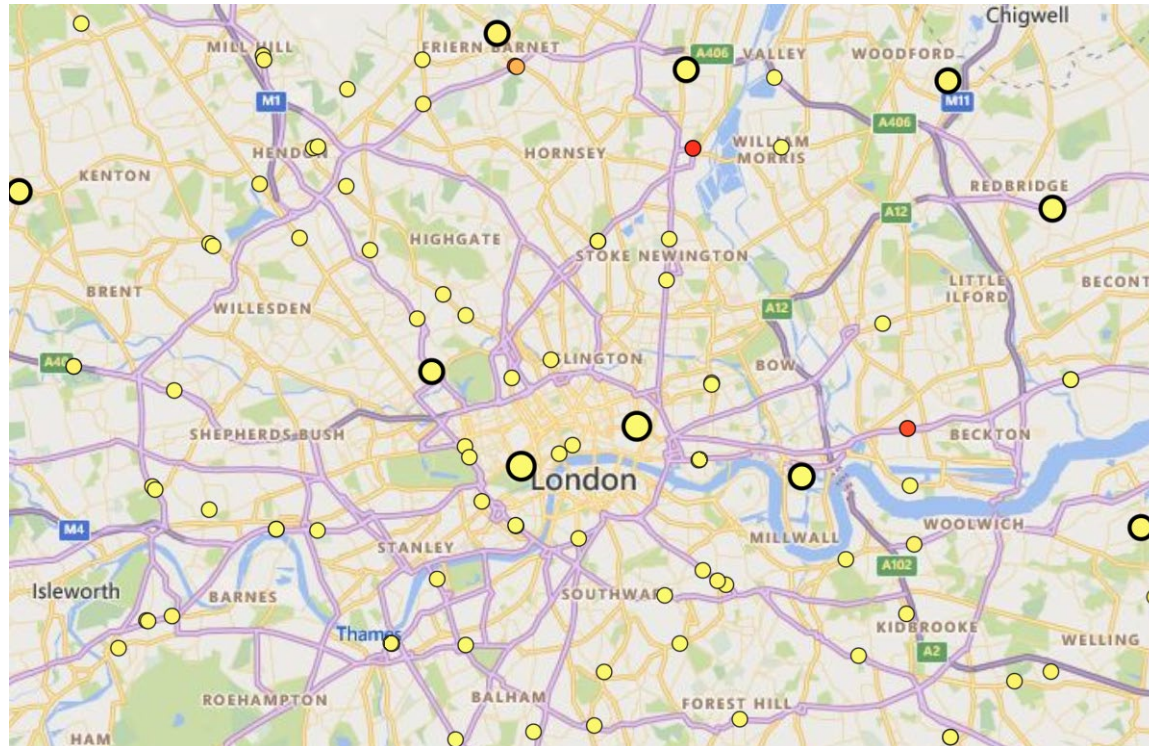
XDI Platform produces analysis for a single asset or for portfolios of millions of assets. Data outputs for each of these levels of scale can be produced at high level aggregated insights, right down to sub asset componentry for deep granularity.



Multiple Assets:

A company's whole portfolio of operations

Company Owned Asset Analysis - Example

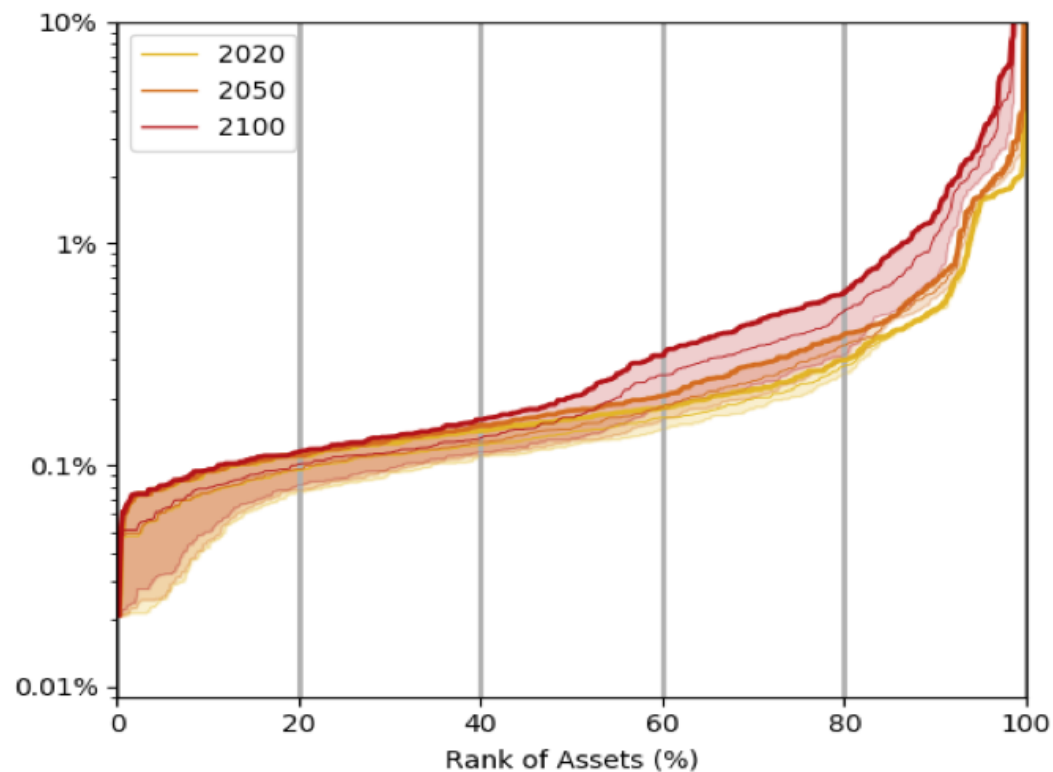


Multiple Assets: Scaling to Portfolios

Asset level analysis is aggregated to provide comprehensive information for finance organisations, banks, investment portfolios, companies and governments

GLOBE Examples

Mortgage Portfolio: In 2020 the XDI group analysed 45 million addresses



Detailed portfolio analysis covering AAL, percentages of high-risk properties, insurance costs projections, LVR risk and Climate Adjusted Valuation

POINT OF SALE SCREENING:
Now the group is providing point of inquiry screening of properties before a mortgage is issued.



Low Risk Rating
May be insurable at reasonable cost



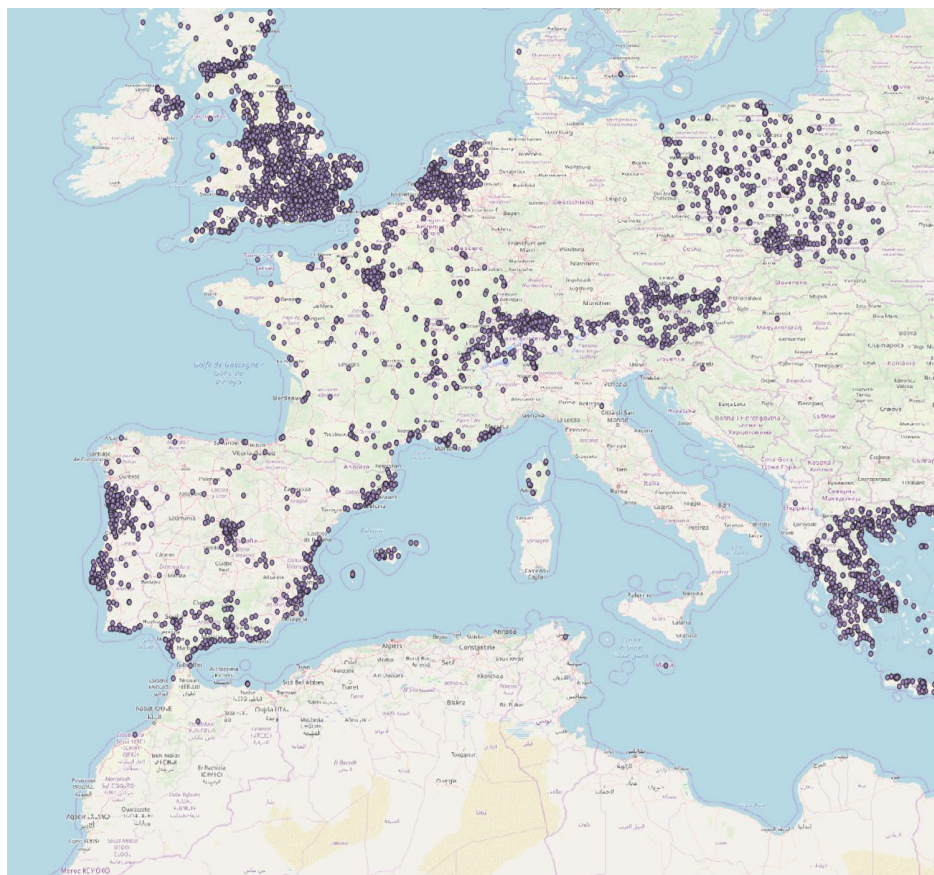
Moderate Risk Rating
May lead to higher Insurance costs



High Risk Rating
Insurance may be high cost or unavailable unless adaptation actions are undertaken

Company Reports

XDI has comprehensive databases of company assets owned and leased

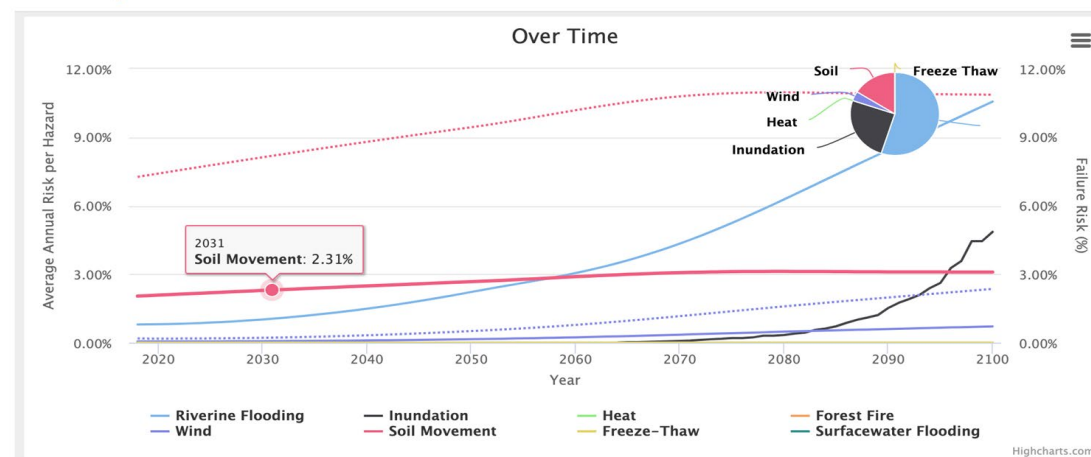


XDI can analyse almost any company in the world – with or without the involvement of that company.

We can provide country level analysis and drill down into the hazards and vulnerability of any individual asset.

Summary 2 Overview Hazard KPI Location Detail Archetype Dependency 0 Adaptation

Multi-Adaptation

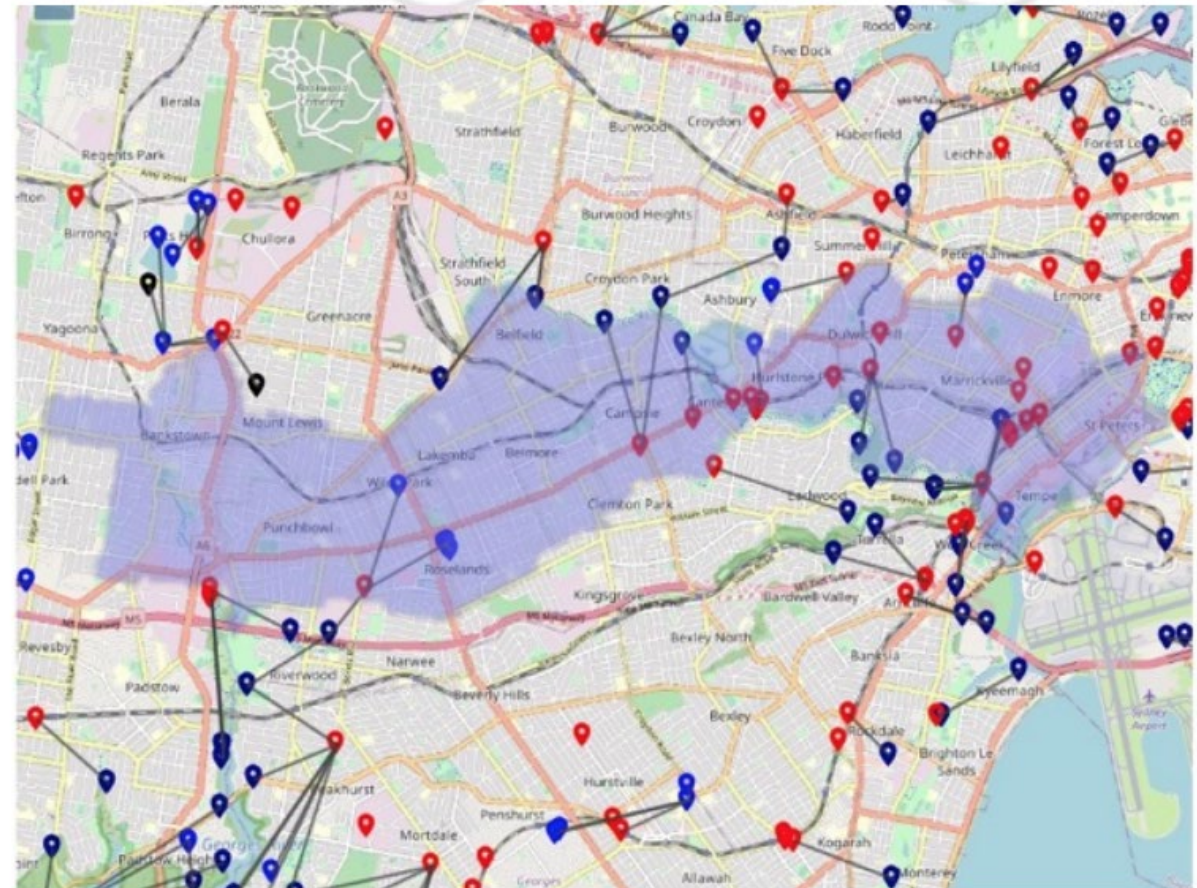


Unique Cross-dependency Analysis

Cross Dependency Testing identifies supply chain risks for assets. Services such as roads, rail, power, comms and water can all fail leading to losses at invested or owned sites.



Screenshots from interactive management tool – XDI Globe



Current regulatory expectations for the assessment and disclosure of physical risks, and how they could evolve moving forward

Task Force on Climate-Related Financial Disclosures (TCFD)

- A framework which helps organisations disclose climate-related risks, thereby promoting informed investment, credit, and insurance underwriting

- Disclosure recommendations are structured around four thematic areas (right)



<https://www.fsb-tcfd.org/>

Climate Biennial Exploratory Scenario (CBES)

- A stress test which the Bank of England ran to explore the UK financial system's resilience to physical and transition climate risks
- Uses three different climate pathways:

Early action	Late action	No additional action
Transition to net-zero begins in 2021	Transition to net-zero is delayed until 2031	No new climate policies

<https://www.bankofengland.co.uk/stress-testing/2021/key-elements-2021-biennial-exploratory-scenario-financial-risks-climate-change>

Feedback on EasyXDI

- ▶ What did you think of EasyXDI?
- ▶ What questions do you have?
- ▶ feedback@xdi.systems

Reflections on the project

- ▶ What did you learn from the project?
 - What fortifies your climate risk knowledge most?
 - What might be most useful at work?
- ▶ What areas of climate risk would you like to learn more about?
- ▶ How helpful was getting experience with advanced technologies that can help measure risk?
- ▶ What could have been improved?
- ▶ What would you like to learn more about next?

Questions/Discussion

Logging CPD

- ▶ This project qualifies for 6 GARP Continuing Professional Development (CPD) credits
- ▶ To record this activity to your credit tracker, please log in to your GARP Account
- ▶ Then navigate to your CPD credit summary or click the following link:
https://mygarp.force.com/sfdcApp#!/cpe_credits
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CPD Credit

CPD ACTIVITY TYPE

Training Courses

DATE OF COMPLETION

03/01/2022

CREDITS

6

Area of Study

SUSTAINABILITY AND CLIMATE RISK ▼

PROVIDER

GARP & XDI

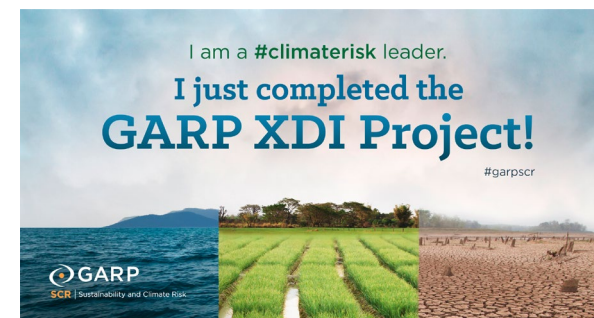
COURSE TITLE

Hands-on Physical Risk Training and Assessment

COMMENT

Share your success on social media!

- ▶ You'll receive an email after this session with some social images and content to share online
- ▶ Feeling creative? Feel free to do your own thing instead!



And don't forget to join the [SCR group](#) on LinkedIn if you haven't already!

For more climate insights you can visit the [climate microsite](#) and follow the GARP [Climate Risk Podcast](#).

Don't forget to share!



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For more information on GARP's work on sustainability and climate risk, please see climate.garp.org

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