TAURUS – Transatlantic initiative to increase the visibility of German system solutions for urban resilience and security

Freiburg, Germany – center of multi-disciplinary resilience research

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Why do we need resilience?
European migration crisis

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Why do we need resilience?
Increase of man-made disasters

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Why do we need resilience?
Frequency and intensity of natural disasters

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Who we are?
Europe's leading organization for applied research

Fraunhofer

- 67 institutes and research units
- 24,000 employees
- Annual research budget: more than 2.1 billion euros
- Application-oriented research for the immediate benefit of economy and society

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Who we are?
A center of multi-disciplinary resilience research

SUSTAINABILITY CENTER FREIBURG

- Multidisciplinary research center
  - ✓ Several hundred researchers
  - ✓ University of Freiburg
  - ✓ 5 Fraunhofer Institutes
  - ✓ Industrial partners like DAIMLER BOSCH
- Topics: **Resilience Engineering**, Materials, Energy, Transformation

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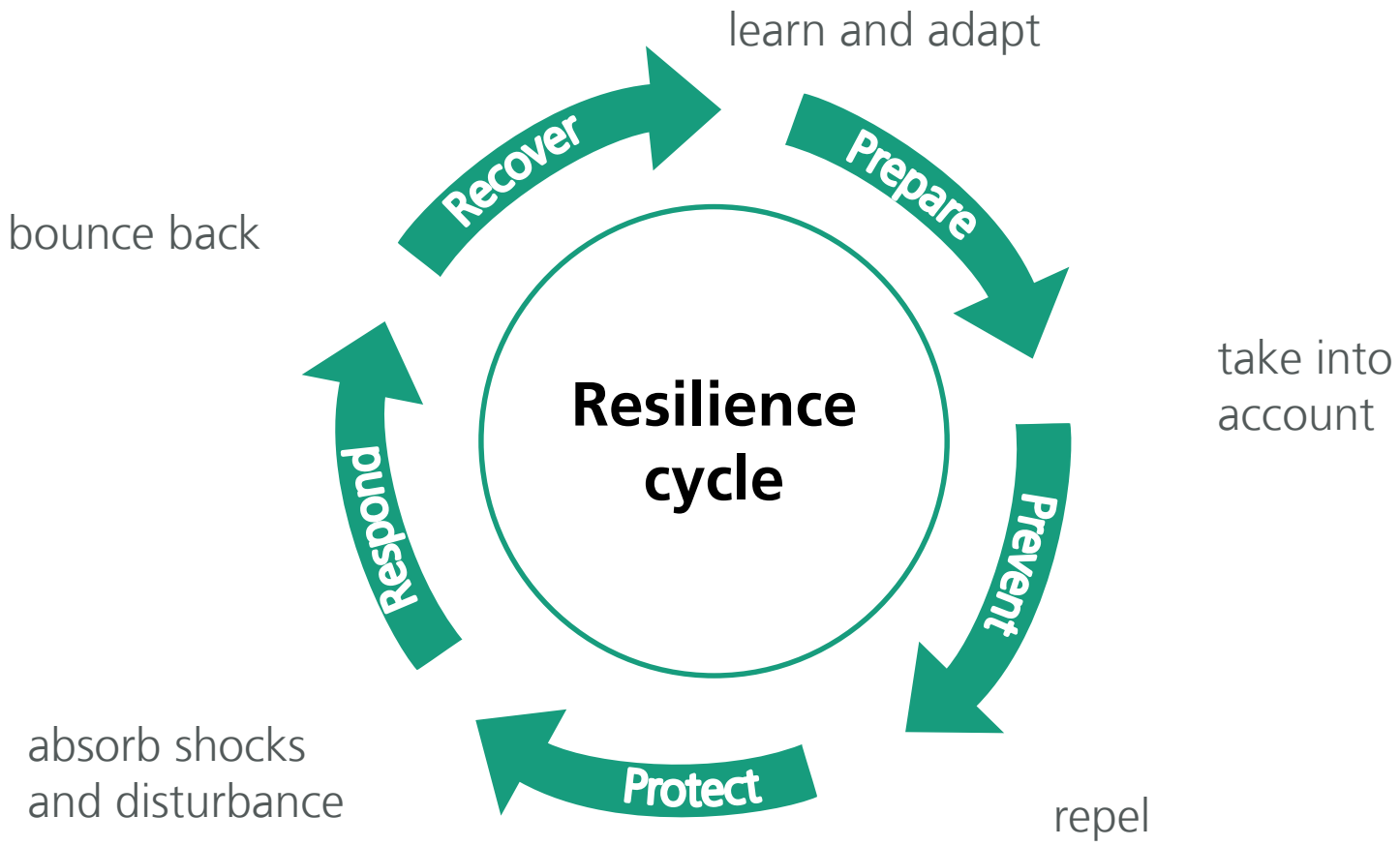
What we do?
Solutions for urban resilience



Source: own diagram, based on Charlie Edwards (2009): Resilient Nation

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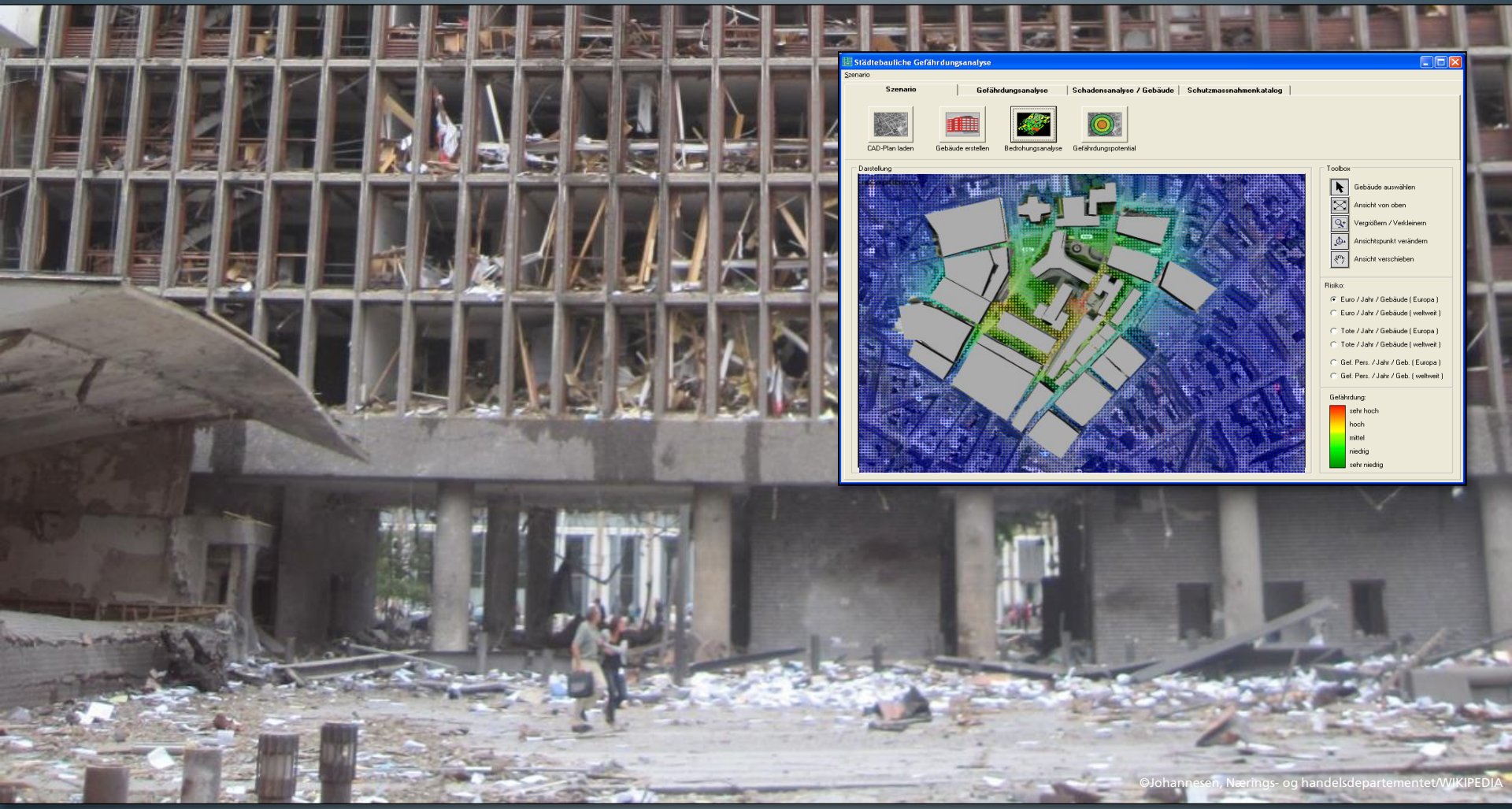
What we do?
Optimizing resilience of built infrastructure



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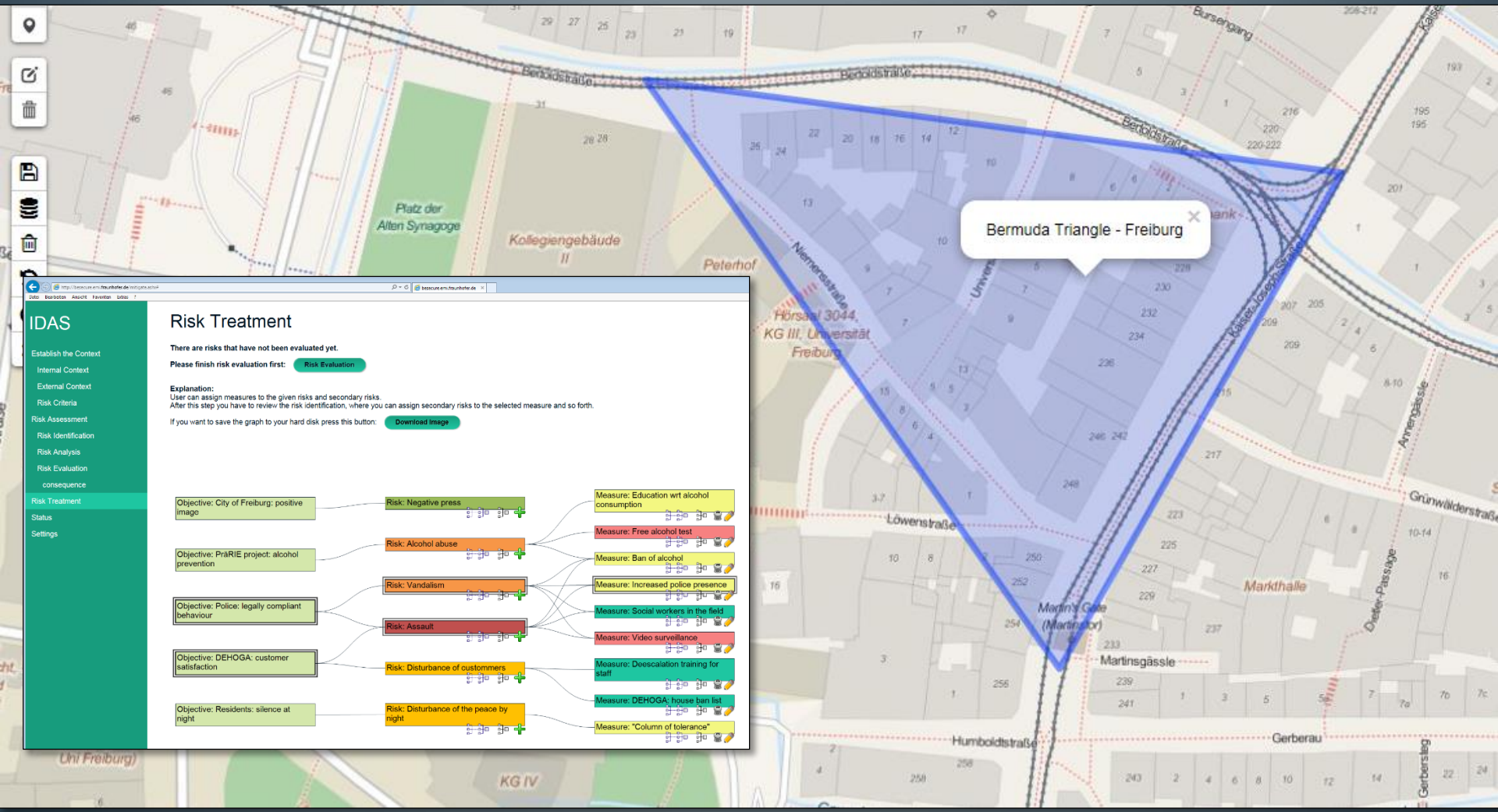
What we do?
Expert software for urban resilience management



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What we do?
Resilient Skyscraper

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Why are we here?
Transatlantic progress in urban resilience research

Technology roadshow (Fall 2017)

- Events in Boston & New York City
- Co-hosting workshop on innovation in infrastructure resilience in California

Expert briefings for end-users

- Virtual demonstrations of resilience management tools

Seminars for academic community

- Concept of resilience and Resilience Engineering

Northeastern

STEVENS INSTITUTE of TECHNOLOGY THE INNOVATION UNIVERSITY

The National Academies of
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