REDUCING RESIDENTIAL EXPOSURE IN HAZARD-PRONE AREAS

Policy Brief

Name of Indicator: Settlement areas in danger zones (share of residential buildings in a hazard zone)
Field of Application: Planning & Finance

This policy brief is part of the ClimEmpower policy recommendations, available from climempower.eu. It translates evidence and project findings into practical guidance for regional and local policymakers seeking to strengthen resilience to climate and other systemic disruptions. It focuses on the concentration of residential buildings in hazard zones and the planning, regulatory and support measures that can reduce settlement exposure over time.

The main recommendation is to limit new residential development in hazard-prone areas and encourage safer settlement patterns through planning and regulatory instruments. Where exposure of existing settlements cannot be adequately reduced, this should be complemented by adaptation and voluntary relocation strategies backed by financial and technical support.

Residential Exposure & Settlement Safety

Key Challenges

- Residential buildings remain concentrated in areas exposed to climate-related hazards
- Land use and housing policy do not always reflect current or projected hazard exposure
- Adaptation and relocation support for affected households remains limited

Good Practices

- Land use and housing policies that restrict new development in hazard zones
- Relocation and adaptation strategies for existing at-risk settlements
- Financial and technical support for affected households

Priority policy actions

Assess residential exposure to hazards
Quantify how many residential buildings and residents are located within hazard zones, and how exposure is changing over time.

Identify high-risk settlements
Pinpoint the specific settlements and neighbourhoods facing the greatest exposure, in order to prioritise intervention.

Restrict new development in hazard zones
Integrate exposure findings into land use and housing policy so new residential development in hazard zones is limited or conditioned.

Develop relocation and adaptation strategies
Prepare pathways for adaptation in place or, where exposure cannot be adequately reduced, voluntary relocation.

Provide financial and technical support
Support affected households with the resources and technical guidance needed to adapt or relocate.

Implementation Roadmap

1

Phase 1 — Exposure assessment

Assess residential exposure to hazards and identify the specific settlements facing the greatest risk.

2

Phase 2 — Regulatory integration

Integrate exposure findings into land use and housing policies, restricting new residential development in hazard zones.

3

Phase 3 — Adaptation and relocation support

Develop relocation and adaptation strategies for at-risk settlements, supported by financial and technical assistance for affected households.

4

Phase 4 — Coordination and monitoring

Coordinate action across governance levels and monitor exposure reduction and settlement patterns over time.

Funding

- **European Regional Development Fund (ERDF)**
  Can finance risk-informed housing and settlement planning.
- **Cohesion Fund / national DRR programmes**
  Can support relocation and adaptation measures.
- **LIFE Programme**
  Can support nature-based buffers for settlement protection.
- **Horizon Europe**
  Can fund research on residential exposure and adaptive housing.
- **National housing and adaptation funds**
  Can further support household-level adaptation and relocation.

Conclusion

Reducing residential exposure in hazard-prone areas improves safety and reduces displacement risk for residents.

It also limits the environmental degradation associated with repeated damage and emergency interventions, reducing long-term costs for both households and public authorities.

Clim EMPOWER