

Unequal exposure and unequal impacts: social vulnerability to air pollution, noise and extreme temperatures in Europe

EEA Report | No 22/2018

Unequal exposure and unequal impacts: social vulnerability to air pollution, noise and extreme temperatures in Europe

ISSN 1977-8449



Key messages

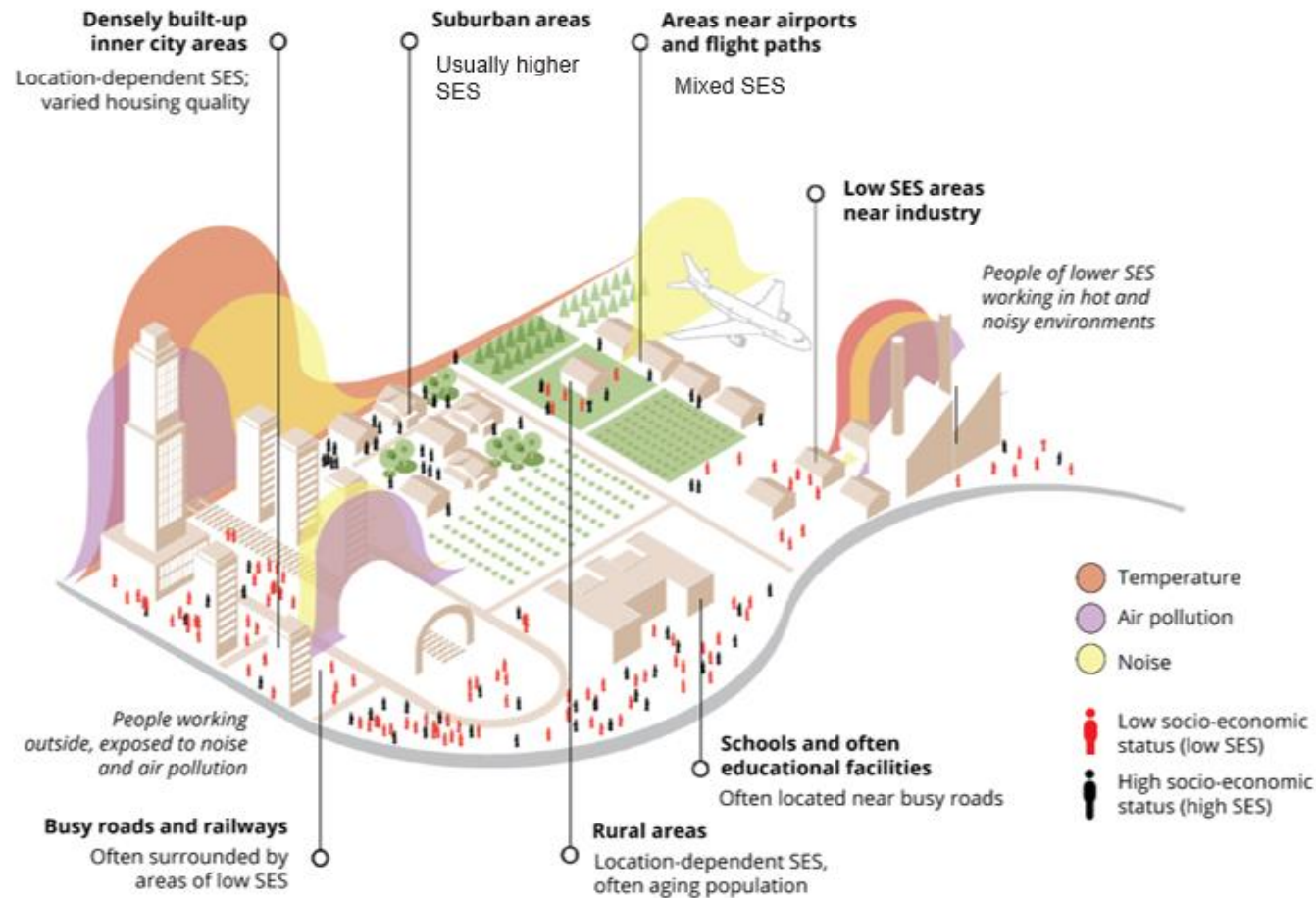
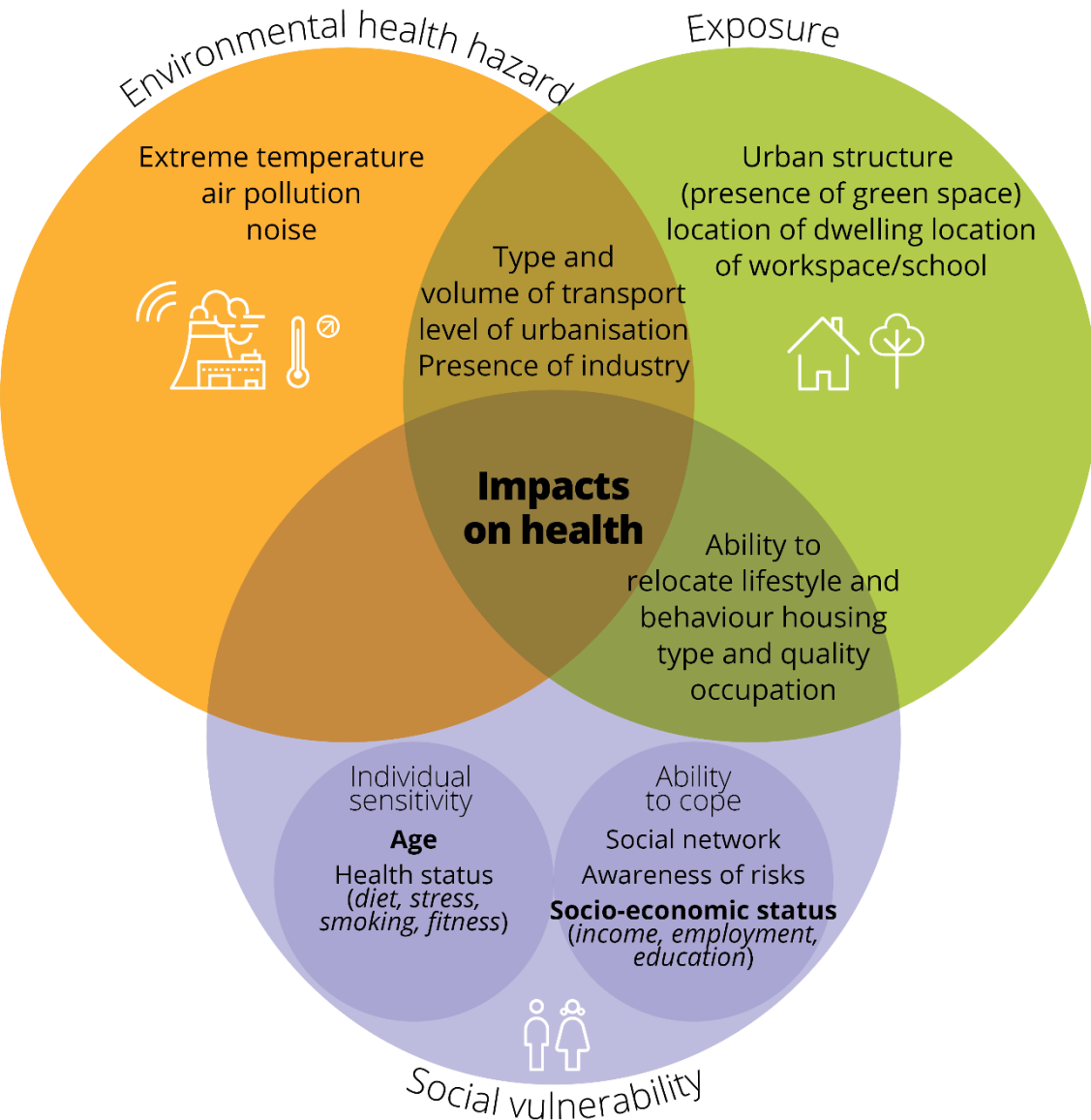
Disadvantaged people tend also to be the worst affected by environmental hazards.

Stark regional differences occur in both socio-economic conditions and environmental quality.

EU policy acknowledges exposure of vulnerable groups - but more action is needed.

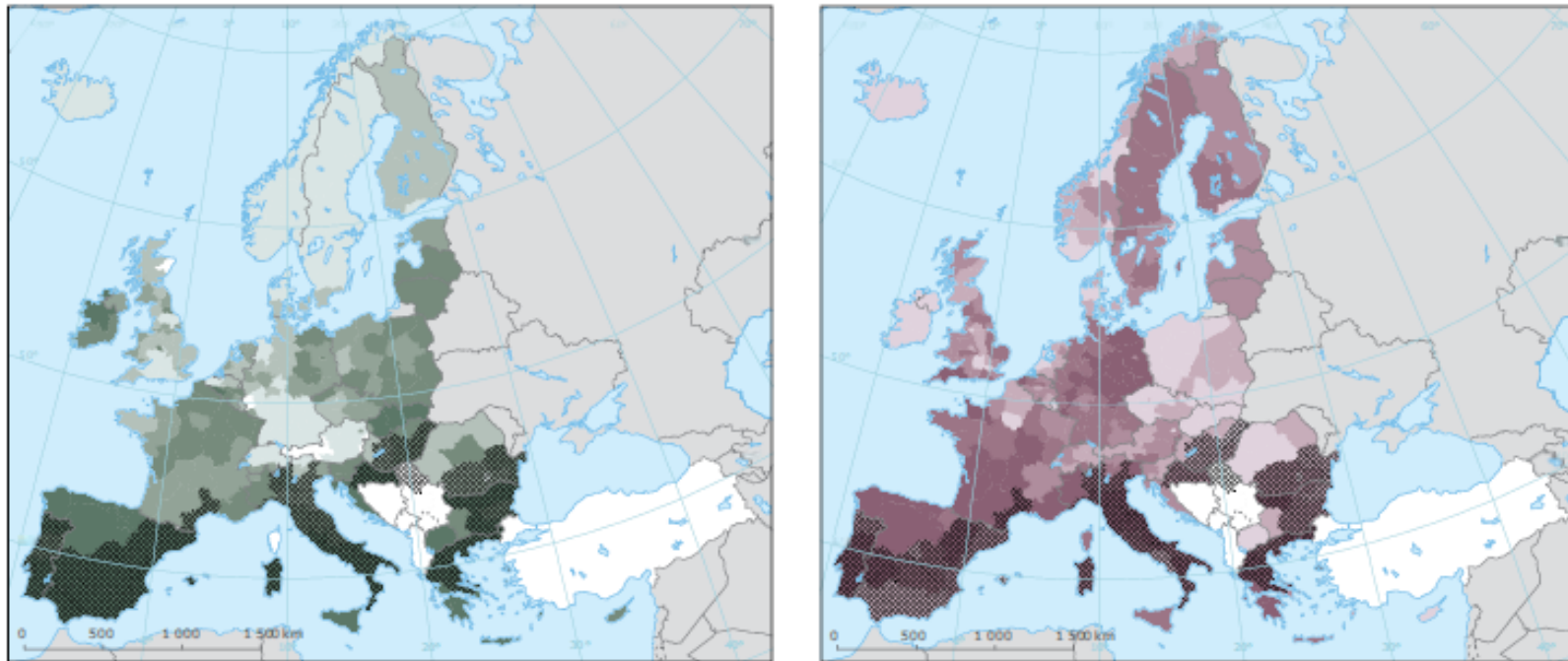
Addressing both social and environmental inequalities requires deliberate policy interventions.

Disadvantaged people tend also to be the worst affected

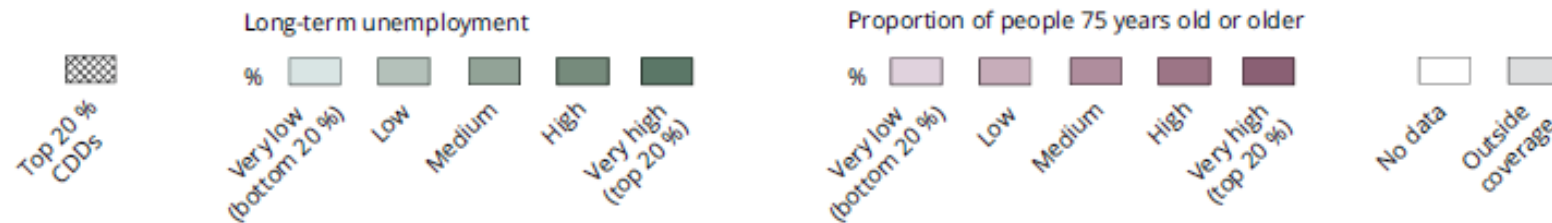


Stark regional differences across Europe

Map 3.7 Annual number of CDDs mapped against long-term unemployment (left) and proportion of people 75 years old or older (right).

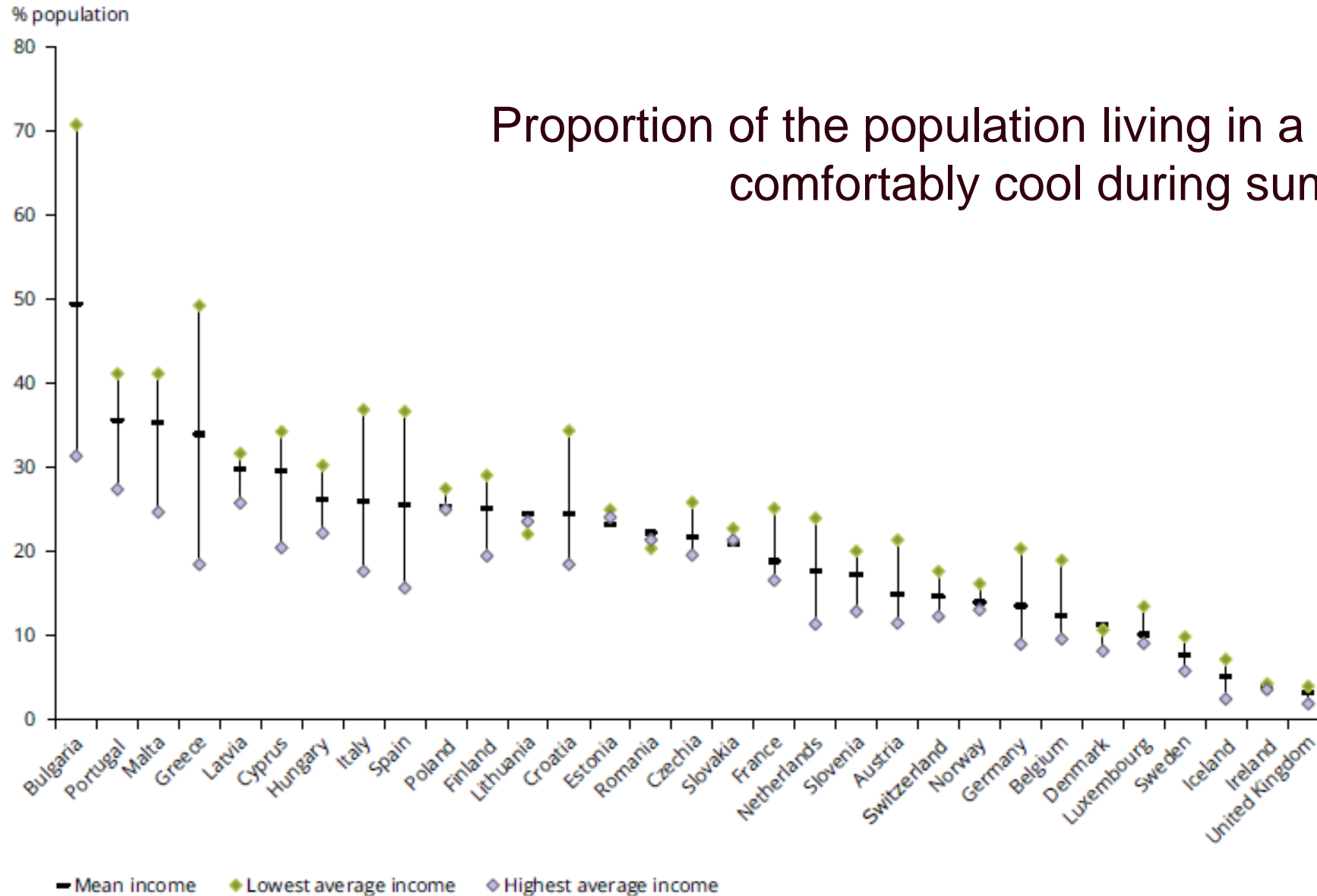


Annual number of cooling degree days (CDDs) mapped against long-term unemployment (left) and proportion of people 75 years old or older (right) (2013-2014)



Source: EEA (2019)

Stark regional differences across Europe



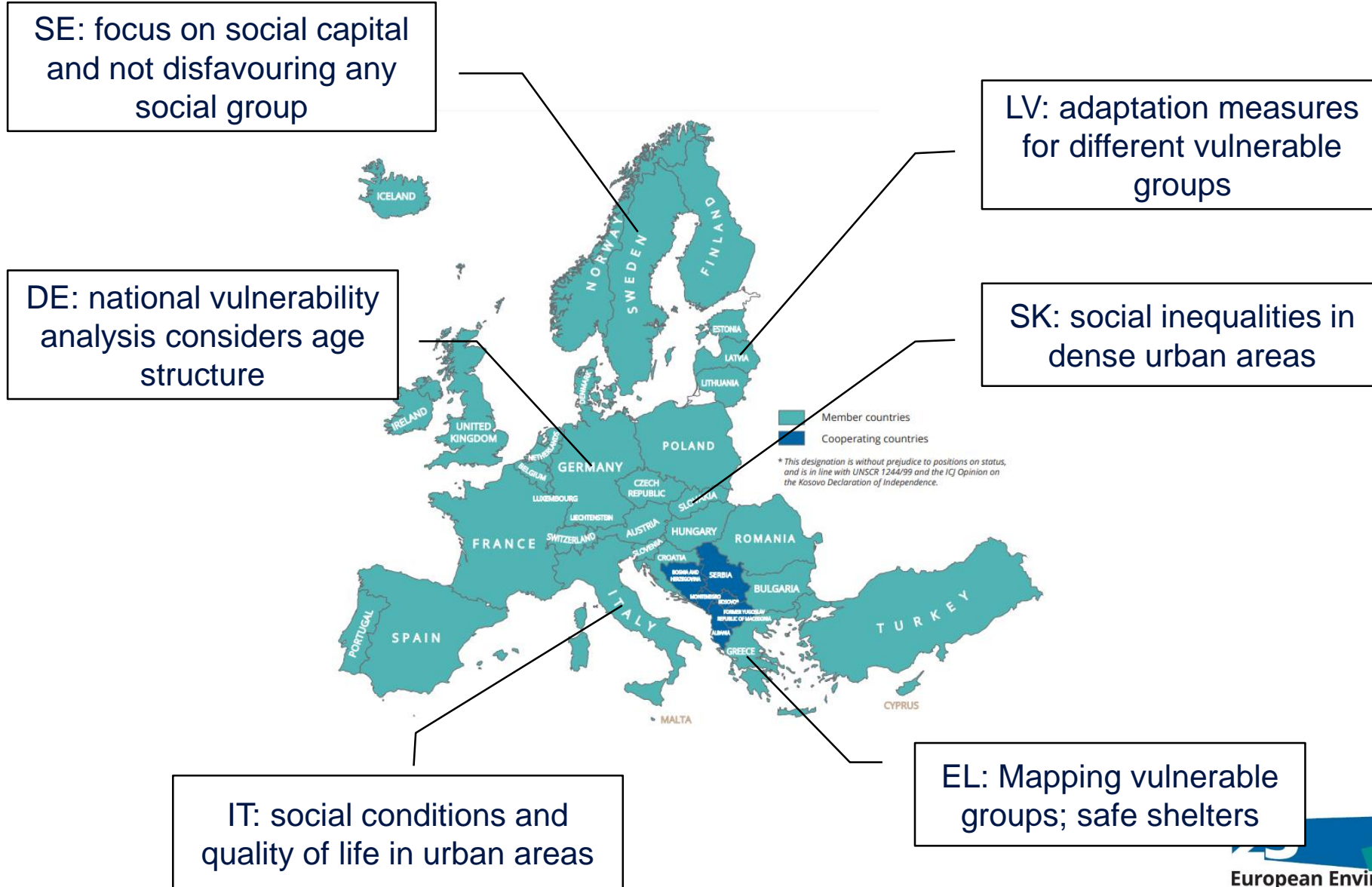
EU policy acknowledges exposure of vulnerable groups...

- **EU strategy on adaptation to climate change**
 - *‘climate change impacts are expected to widen **social differences** across the EU’*
 - special attention needs to be given to *‘social groups and regions which are most exposed and **already disadvantaged** (e.g. through poor health, low income, inadequate housing, lack of mobility)’*
- **Evaluation of the EU strategy on adaptation**
 - *The strategy may be able to deliver more in the future in certain areas, such as (...) **Promoting the assessment and mapping of social vulnerability to climate-related events***
- The 2016 **Urban Agenda for the EU** considers urban poverty and climate adaptation among 12 priority themes

... but more targeted action is needed

- Opportunities at the EU level
 - Enhanced policy coherence
 - Improved data and reporting
 - Review of the EU adaptation strategy

National Adaptation Strategies – examples



Towards equitable local adaptation

- Lack of knowledge on social impacts hinders adaptation (Mayors Adapt survey 2015)
- Limited guidance on the identification of vulnerable groups, procedural justice or monitoring of social outcomes of adaptation (ETC/CCA, 2018)

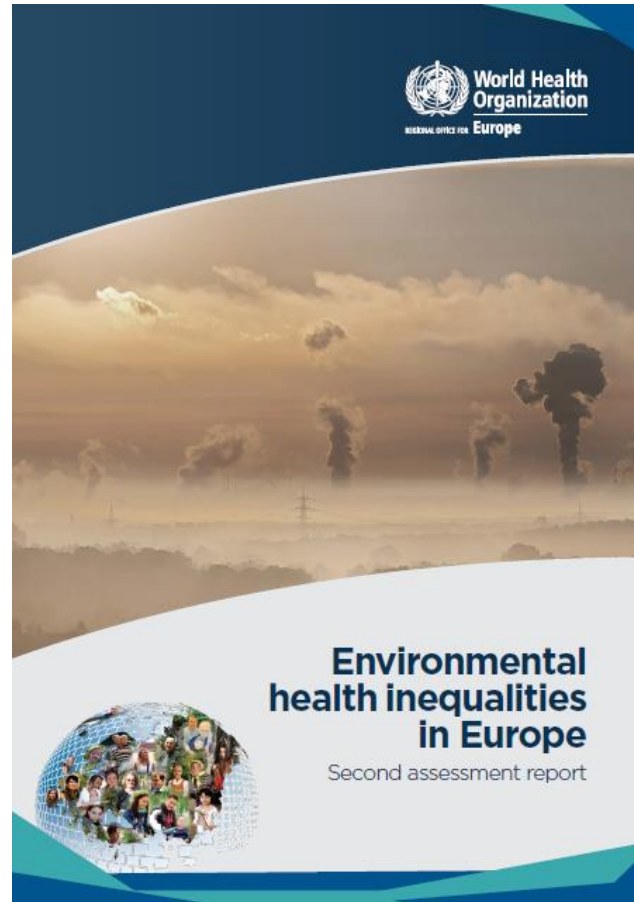
Examples of local action including:

- Local assessments of vulnerability
- Heat action plans
- Improvements of living environment
- Community-led initiatives

Measure type	Reduced exposure				Reduced vulnerability
	Air pollution	Noise	Heat	Cold	
Active mobility and public transport	✓	✓			✓
Urban planning and design focusing on green infrastructure and transit-oriented development	✓	✓	✓		✓
Housing with adequate thermal isolation, noise reduction and ventilation		✓	✓	✓	✓
Awareness-raising and encouraging participation	✓	✓	✓	✓	✓

Impact of the report

- Launch event 4th Feb
- Contribution to WHO report
- EP European Economic and Social Committee public hearing 27th June



Pollution
Europe's most deprived areas 'hit hardest by air pollution'
Exposure to particulate matter and ozone highest in poor eastern European states, says study

Brudne powietrze bardziej szkodzi biednym

dS+
Wie armer is, heeft meer last van slechte lucht, lawaai, koude en hitte
04/02/2019 om 12:00 door **Ine Renson**

Ue, Italia con più aree rischio per smog
Agenzia europea, diseguaglianze aumentano impatto inquinamento

DESIGUALDADES
Crianças, idosos e pobres são os mais afectados pela poluição e temperaturas extremas
Relatório da Agência Europeia do Ambiente aponta desproporção entre a exposição a riscos ambientais e a condição económica das populações.

Pollution: les plus pauvres et les plus vulnérables sont les plus exposés

Europäische Umweltagentur
Dreckige Luft und Lärm treffen die Ärmsten