Why healthy housing?

For many years, the housing environment has been acknowledged as one of the main settings that affect human health. The buildings in which we live, the neighbourhoods in which they are situated, and the regions to which they are linked determine, for example, the quality of our indoor air, the access we have to healthy foods, recreation facilities, and gainful employment. Much of our everyday lives, and hence our health, are associated with the condition, design, and location of the place where we reside.

Housing construction, maintenance, where houses are located (access to services) and how they are occupied, all have an impact on the health and well-being of the occupants and are appropriate targets for policy. Using the DPSEEA model (see figure 1) we can identify many important challenges, drivers and exposures in the domain of housing.

Some important drivers in the area of healthy housing are:

- population density;
- population ageing;
- economy/income (increasing socio-economic inequalities);
- life styles;
- spatial planning and policies regarding housing materials;
- construction standards;
- consumer products and energy saving as well as urban design (access to healthy environment, services, mobility); and
- transport.

There are a variety of indoor chemicals (VOCs, CO, NO_2, tobacco smoke, asbestos), microbiological (mould, dust) and physical exposures (temperature, radon and radiation) in and around houses and building blocks associated with a range of health impacts (annoyance, asthma, cardiovascular diseases, etc.).

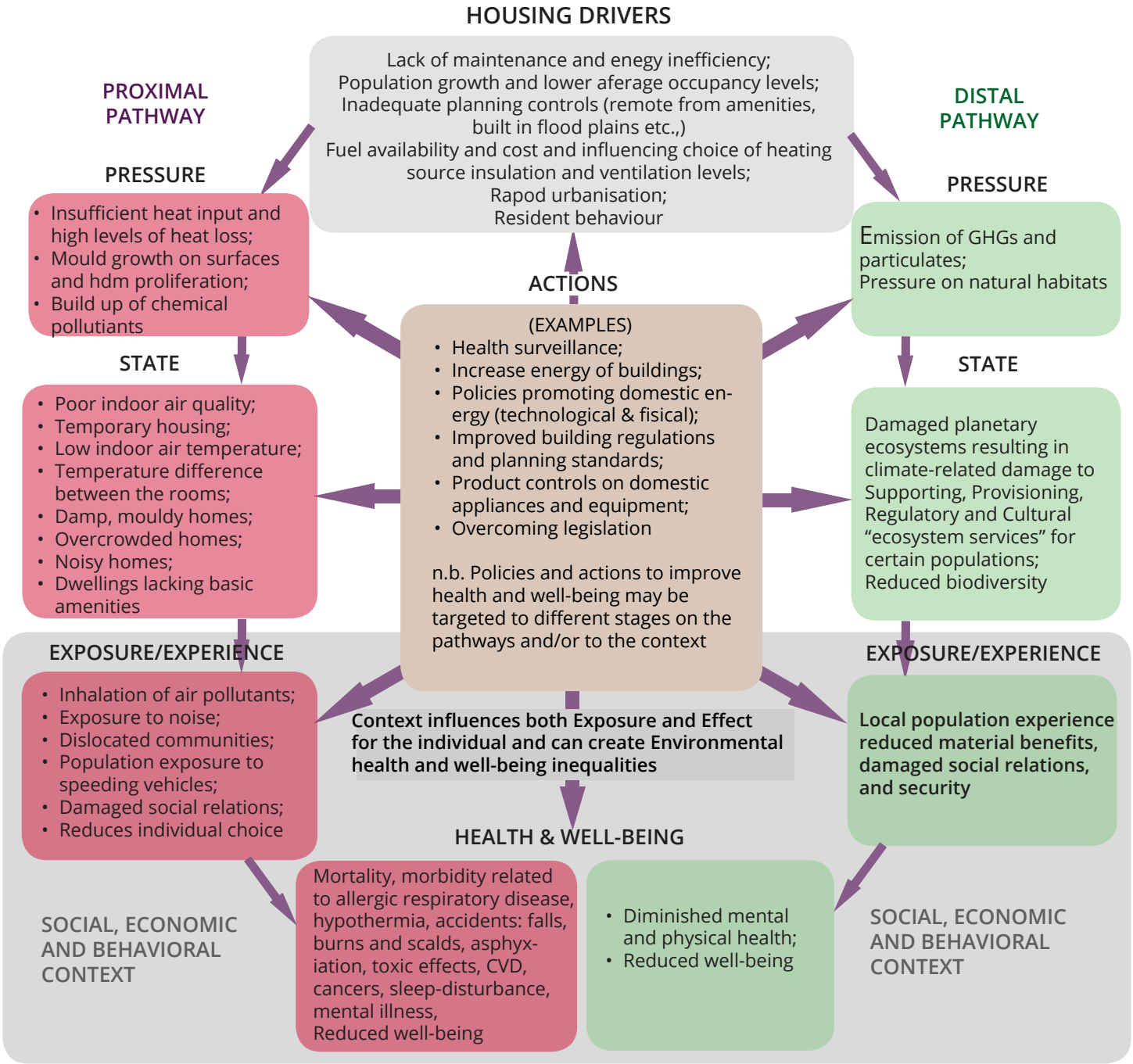
Figure 1 expresses something of this complexity but also illustrates another important point, namely that identical drivers can influence health through both a proximal (near in space and time) pathway but also a distal (or ecosystems) pathway. By extension, carefully conceived policies and actions can be relevant to both proximal and distal pathways. By framing issues using this simple conceptual framework, policies and actions can be highlighted which confer co-benefits, but which may also impact negatively on another domain. In the case of housing for example, policies to secure energy efficiency might reduce ventilation rates and by extension GHG emissions. However, the very same policies might profoundly reduce indoor air quality to the detriment of occupant health and well-being.

Policy actions

In many EU countries the main obstacles (or challenges) in developing healthy housing are a lack of awareness of potential health impacts amongst citizens, policy-makers and inspectorates, as well as contradictory regulation (e.g. energy saving vs ventilation). There is a lack of coherent policies, due to the difficulty of cross-sectorial or cross-ministerial collaboration.

The conflicting areas between housing policies and environmental health should be considered at an early stage of planning in order to minimize negative health impacts. Suitable indicators need to be developed to evaluate the health impacts related to housing and spatial planning in a systemic way (Figure 2). We see large social inequalities in housing, between and within EU Member States (Figure 3).

Figure 1. Application of the dDPSEEA model to housing



n.b. Global economic social and ecosystem connectivity means the distal pathway can impact on the proximal pathway in health relevant ways and vice versa

Figure 2. Selected indicators on environmental and health effects of housing

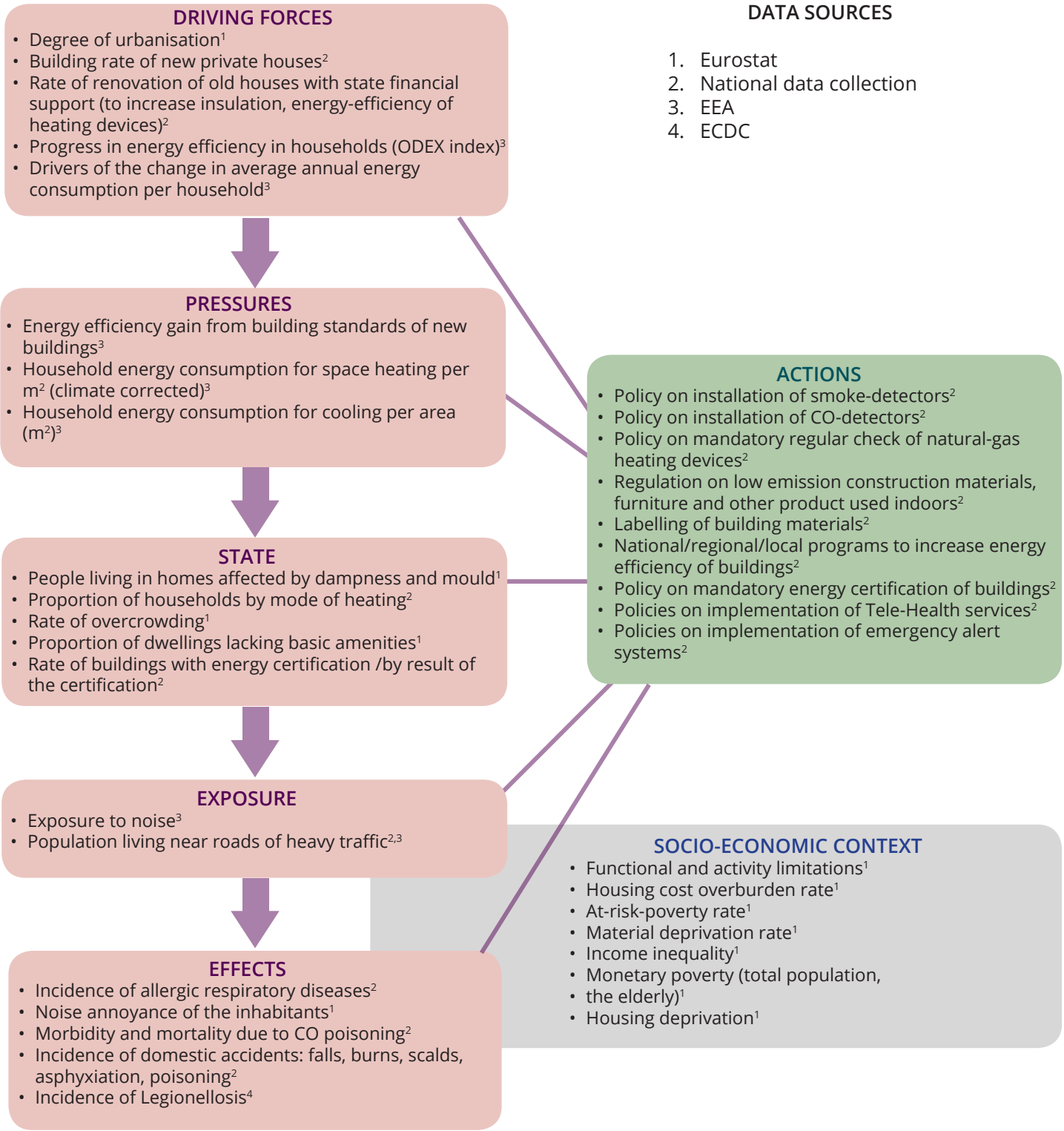
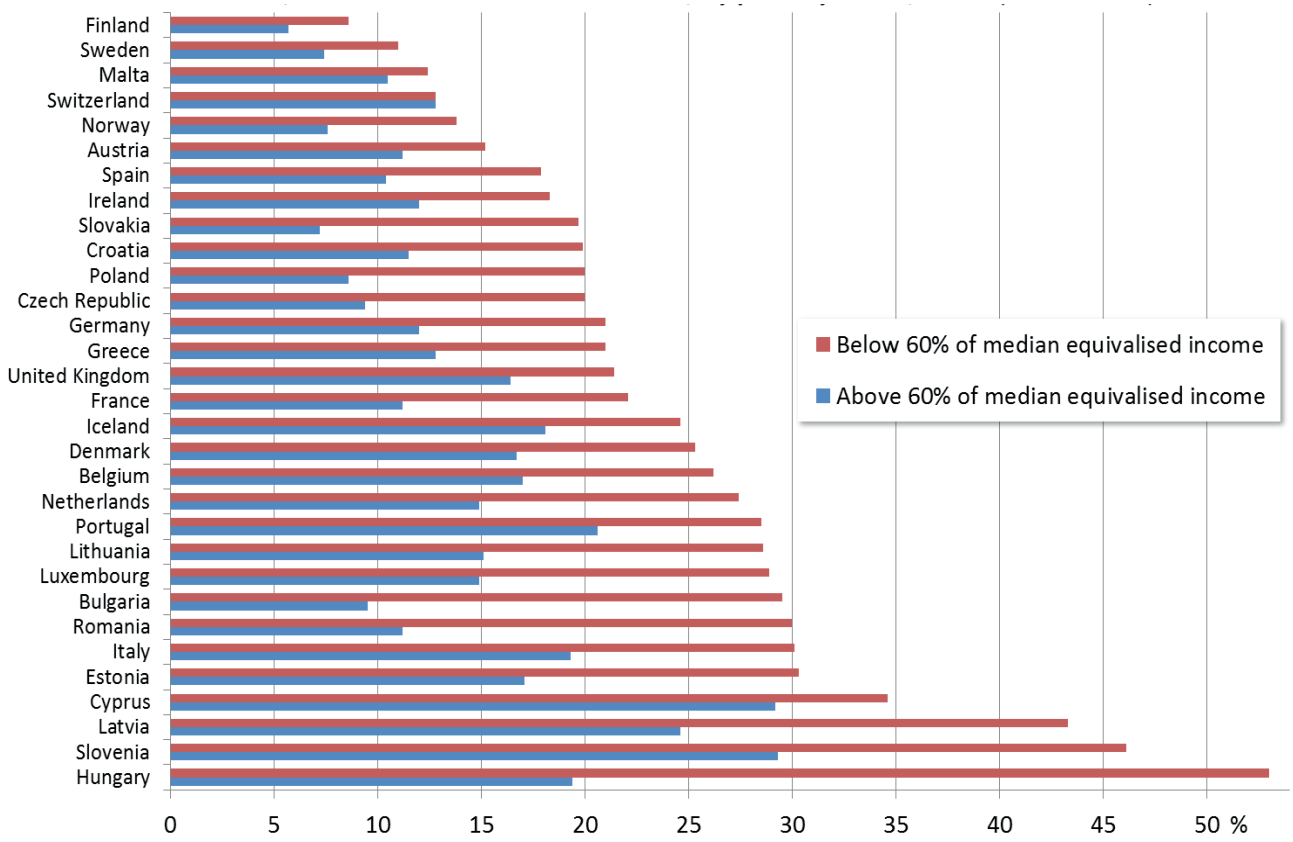


Figure 3. Share of total population living in a dwelling with a leaking roof, damp walls, floors or foundation, or rot in window frames of floor; by poverty status, 2012.



Source: EUROSTAT, European Union Statistics on Income and Living Conditions (EU-SILC), available at: http://ec.europa.eu/eurostat/web/income-and-living-conditions/data/main-tables

Key messages

Indicators and data on housing are widely available in international databases and can be amended by national data collections.

Structured analysis and reporting are needed in future health impact assessments, for which a combination of the modified DPSEEA and distal DPSEEA models is a useful tool.

Several national policies proved to be effective in facilitating the provision of healthier housing.

An international compendium on effective good practices could be helpful in developing European-wide measures to ensure healthy homes for the citizens.

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