

# Multi-Level Evolution of the Problem

This exercise borrows from the Sustainability Transitions Research Network's (STRN) concept of Multi-Level-Perspective (MLP) of historic socio-technical transitions. We use their framework as a way to understand the ways in which complex, wicked problems arise and evolve within socio-technical-ecological systems. The MLP provides a radically large, spatio-temporal matrix within which to frame a problem and consider both the material (artifacts/processes/guidelines/policies/technology/environmental factors etc.) and the non-material (worldviews, cultural/professional norms, values etc.) factors that give rise to the problem and that are barriers to positive, sustainable, equitable systems-level change.

THE PROBLEM

TEAM MEMBERS

**THE PAST** (groups should discuss and develop a timeline for their investigation)

**THE PRESENT**

## Landscape

*large, slow moving events/norms*

The Landscape or 'macro' systems level, is a type of 'societal landscape' where large-scale change occurs. These changes are diverse and can include things like changes in the macro economy, political culture, demography, the natural environment, large technological changes, but also non-material social/cultural changes such as shifts in worldviews and paradigms. Change at this level is usually slow moving and resistant to change (but can be sudden as with large-scale cataclysmic change such as environmental events such as earthquakes or man-made catastrophes which change entire societies suddenly). Seismic undercurrents at this level can play an important role in speeding up or slowing down a transition, but its geology is for the most part unyielding. Changes at the Landscape level can exert pressure at the Regime level that fractures intractable/'stuck' structures which can open up new possibilities at the Niche level that can further exacerbate or catalyze systems-level change. On post-it notes list the factors at the Landscape level that contributed to rise to the problem. If they exerted pressure on the Regime level, please indicate the transition/path.

## Regime

*'stuck' infrastructure/ways of doing things*

The Regime level is the level that is "stuck" and where dominant/established "ways of doing things" are situated. It is comprised of the social norms, interests, rules, and belief systems that underlie strategies of companies, organizations, and institutions as well as politics and governance (policies). At this infrastructural level, system dynamics are determined by dominant practices, rules, and shared assumptions that are most geared towards optimizing rather than transforming systems. Change is incremental and "path-dependent." Pressure from the Landscape level can begin to fracture or challenge dominant ways of doing things and open up space for innovations, new inventions and norms to bubble up from the Niche level below. On post-it notes list the factors at the Regime level that gave rise to the problem and the factors that keep it 'stuck' or create 'path dependencies'.

## Niche

*experiments w/potential to disrupt*

The Niche level is where protected new or radical experiments/innovations/new ways of doing things can occur and not immediately or directly compete with their established counterparts at the Regime level. These 'seeds of change' are comprised of individual actors, technologies, and local practices that are deviations from the status quo. The norms at the Niche level are different than those of the Regime and more malleable/less established. Successful Niches compete with incumbent regimes, outperform them and eventually take over. In this way Niches are a source for transformative ideas and capabilities but not blueprints. Sometimes large-scale events at the Landscape level exert pressure/open up opportunities at the Regime level for Niches to gain traction and create systems-level change. On post-it notes map the experiments and factors at the Niche level that may have contributed (or attempted to address) the problem. If these Niches bubbled up to the Regime level over time, please indicate their transition.