

Resilience indicators, energy limitations and leverage points for human communities

A three-pronged proposal

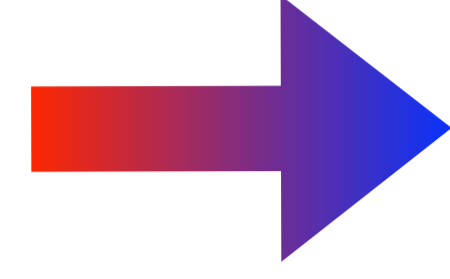
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Energy futures,
environment and well-
being
Naples (Italy), 25-28
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WHY

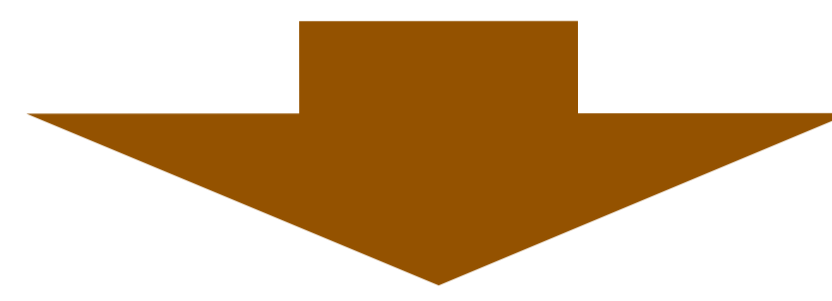
Suggestions/collaboration on proposal: highly welcome!

monitoring tools of system
metabolism



health status (i.e. the capacity to adapt, spring back)
capacity to plan, organize the validation of its action
course aimed at perpetuating itself (semantic closure).

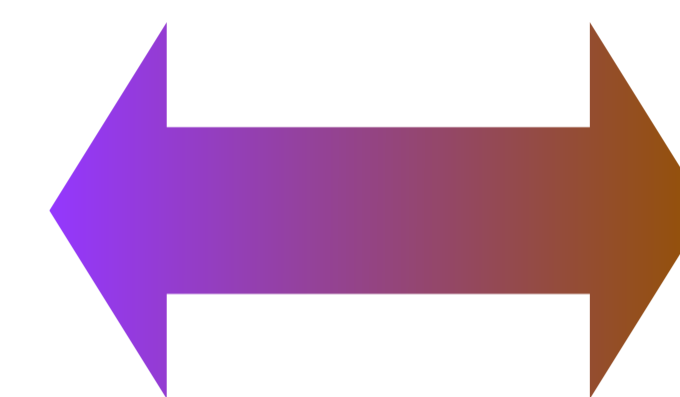
Study robustness as transitions tools for communities: town, region, state



HOW 1 Indicators sensitivity to energy availability

Perform meta-study

extract dependence of definition/calculation and/or input to
indicators on high transformity forms of energy (electricity,
most of all)

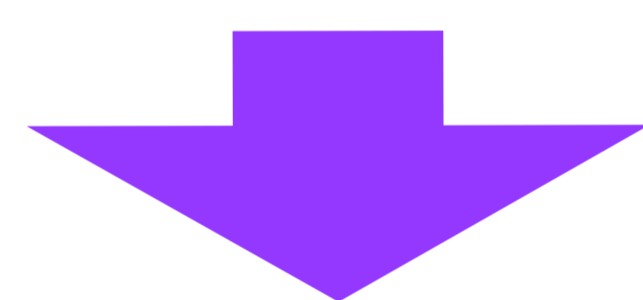


Compare predictions/
assessment from two indicators
classes (more, less sensitive)

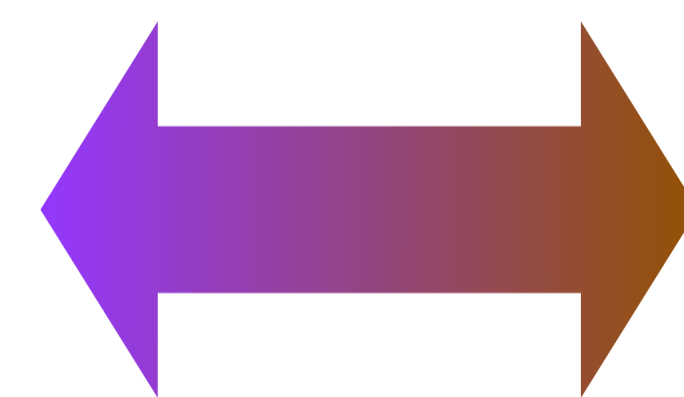
for 3 different human community &
ecosystems scenarios:
town, region, state

HOW 2 Indicators for minimum survival level

Include information from planetary
energy constraints in indicators



Define "minimum survival level"



test dependence of definition on different
external reference and social validation
schemes

in 2 different community types
industrialized/urban less industrialized/rural
@ town level

HOW 3 Indicators as tool box for change

Meta-study to investigate

connection between supporting change in communities
and leverage point (small change , large modification)



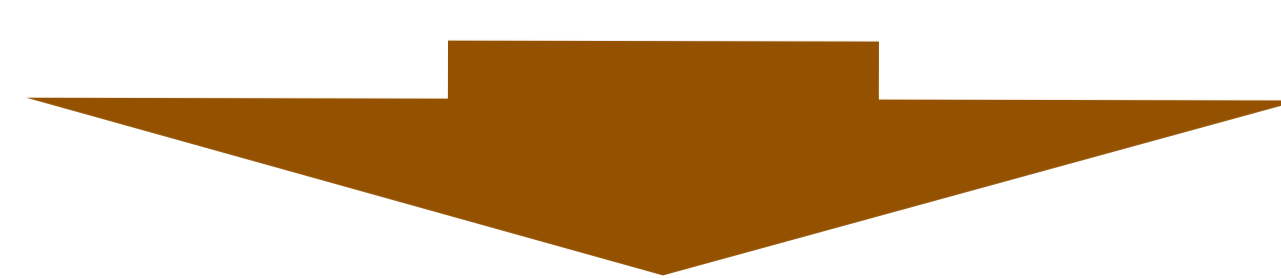
Is it possible to define an algorithm/indicator
acting as leverage point finder ?



Test in simulated examples
(simulated town, agent based model?)

Connection to communities to find/
test live examples/scenarios

experiment in participatory research!)



Enhance indicators robustness and usefulness to community, increase their value to participatory analysis and action