A Journey from Environment to Place:
What is it about? Why is it important?

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In essence, this talk is a reflection on the difference between two ways of looking at the environment in public health research and policy making –

1. "Environment and Health"- Ostensibly old fashioned but still very relevant and useful in many contexts

2. "Healthy Places" - A more modern way which, for me, implies the possibility to make better headway against some very complex and intractable public challenges (and indeed some very ominous threats)

"Public health is wrapped around the reality of change"

"The actions of those seeking to improve public health and wellbeing will vary as circumstances and conditions dictate"

Rayner & Lang (2012)

2 distinct, but related, categories of change continually shape and reshape the foundations of public health:

Category 1 - Large scale, long term changes at the level of society which act on the material, social, cultural determinants of health and wellbeing

Category 2 - An "Evolution of Ideas" determines our basic understanding of how health is created and destroyed

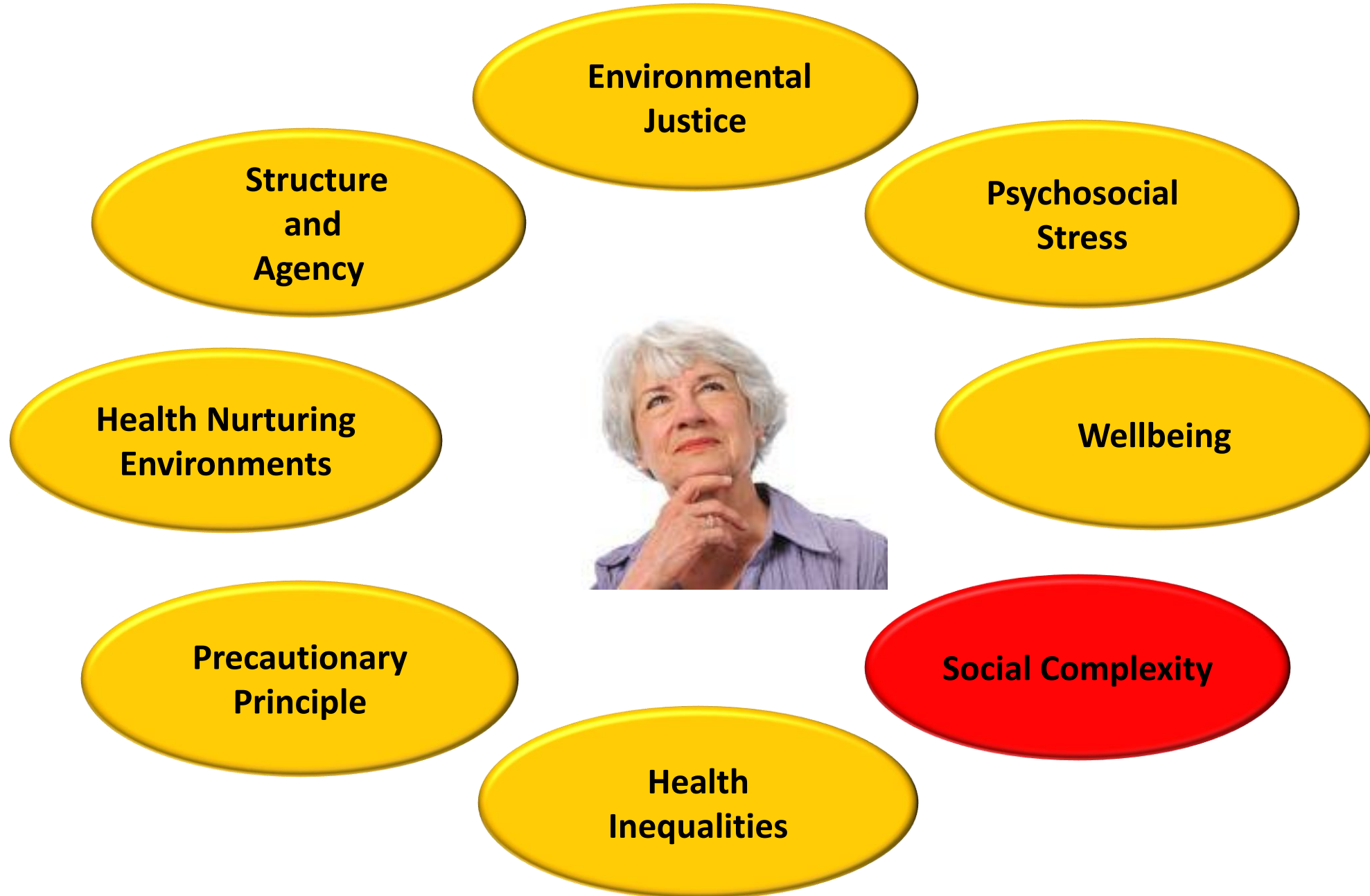# CATEGORY 1: **Transitions at the level of Society**
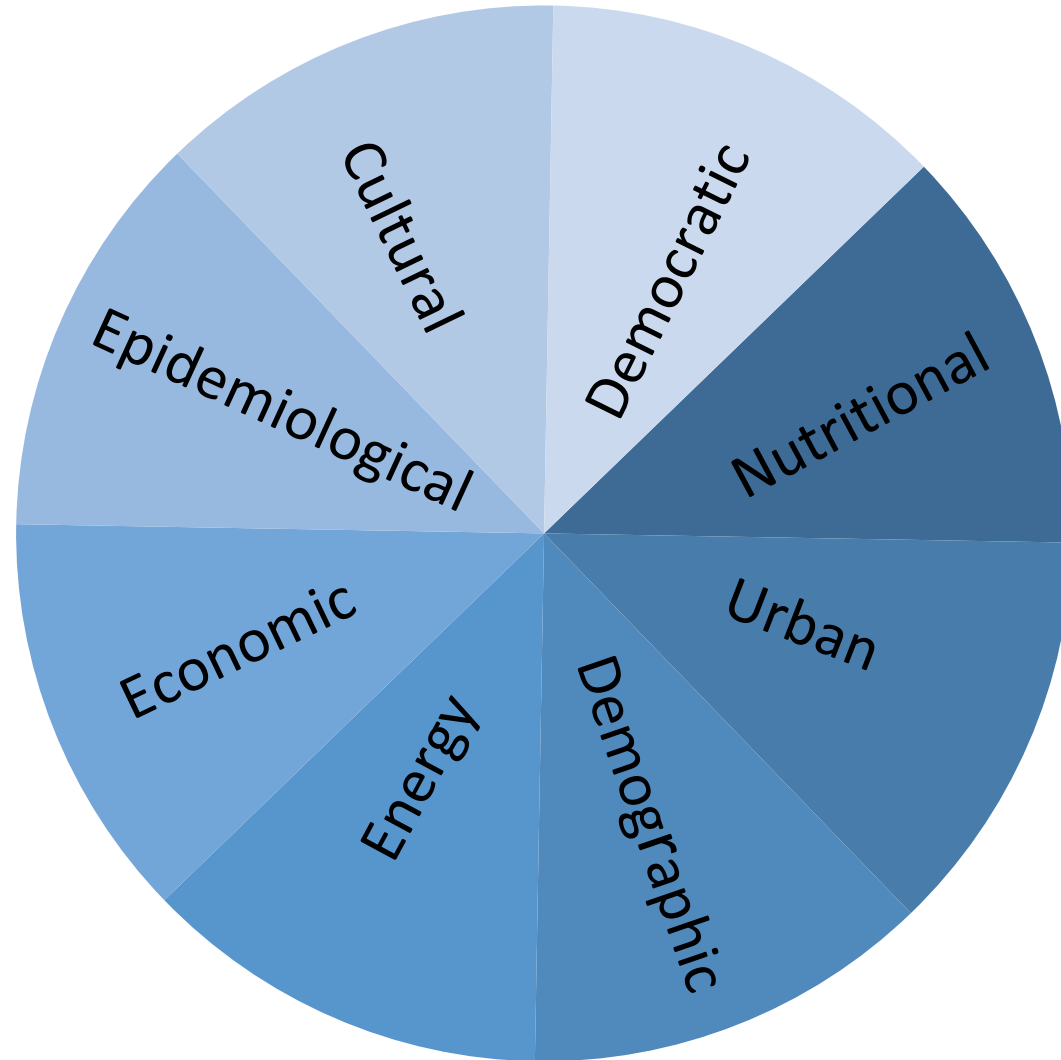
In combination, these transitions matter, amongst other reasons, because they influence, in health-relevant ways, the physical context of our lives and how we as individuals interface with it

CATEGORY 2- **The Evolution of Ideas about health and its determinants**

Environmental Justice

Structure and Agency

Psychosocial Stress

Health Nurturing Environments

Wellbeing

Precautionary Principle

Social Complexity

Health Inequalities

Category 2 - The Evolution of Ideas about health and its determinants

As these ideas emerge, evolve and are embraced
they influence how we understand the role of the physical environment
in our health and the approaches we adopt to manage it

"Good Places Better Health"
An important part of public health's journey from "environment" to "place"in Scotland

GOOD PLACES, BETTER HEALTH

A NEW APPROACH TO ENVIRONMENT AND HEALTH IN SCOTLAND

IMPLEMENTATION PLAN

The Scottish Government

GOOD PLACES BETTER HEALTH was a national policy initiative which sought to reflect a much richer understanding of the role of environment in health, wellbeing and equity in Scotland

The initiative was driven in large part by a belief that the physical environment was much more important for Scotland's health than was generally reflected in policy

In Scotland, especially, there was another important driver!

"By far the most significant issue which the Chief Medical Officer has to face is the problem of health inequalities."

Sir Harry Burns
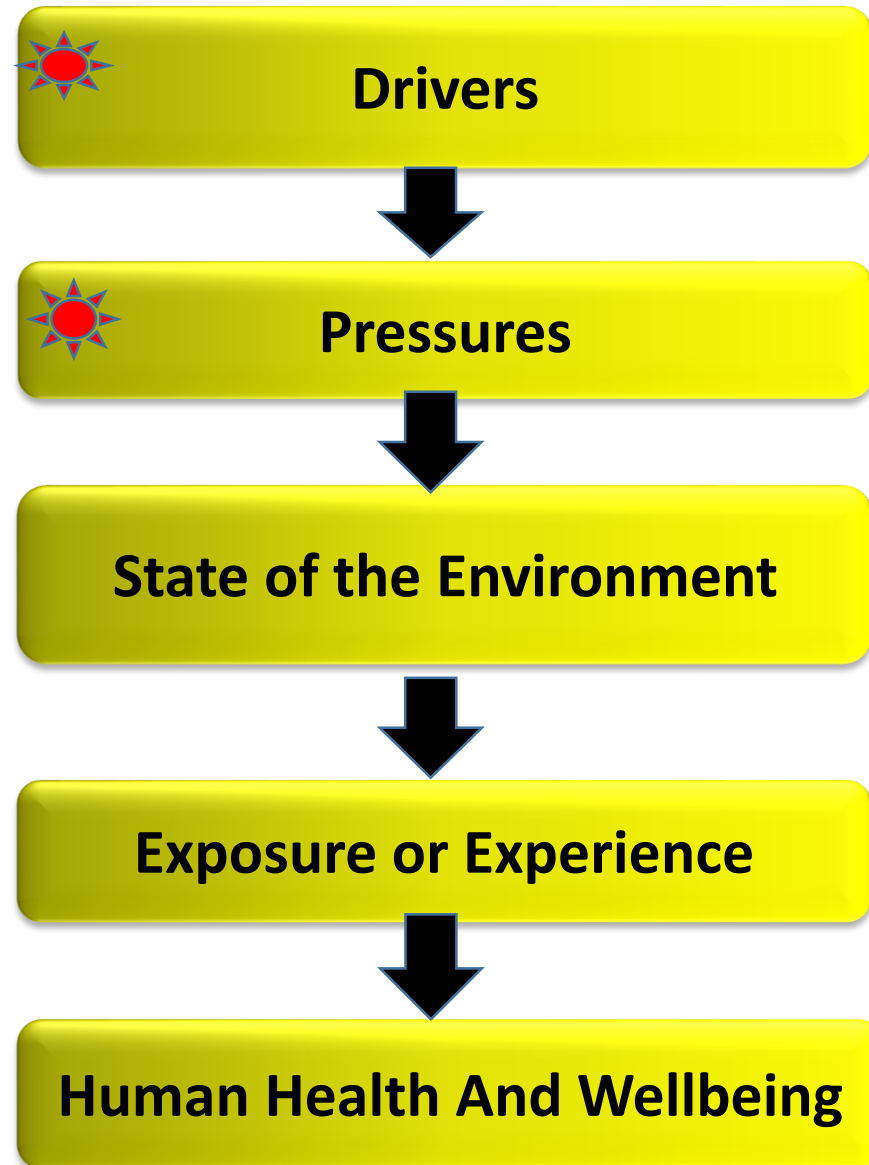Scotland's Chief Medical Officer (2005 -2014)

Hazardous Environmental State

Exposure

Diminished Human Health
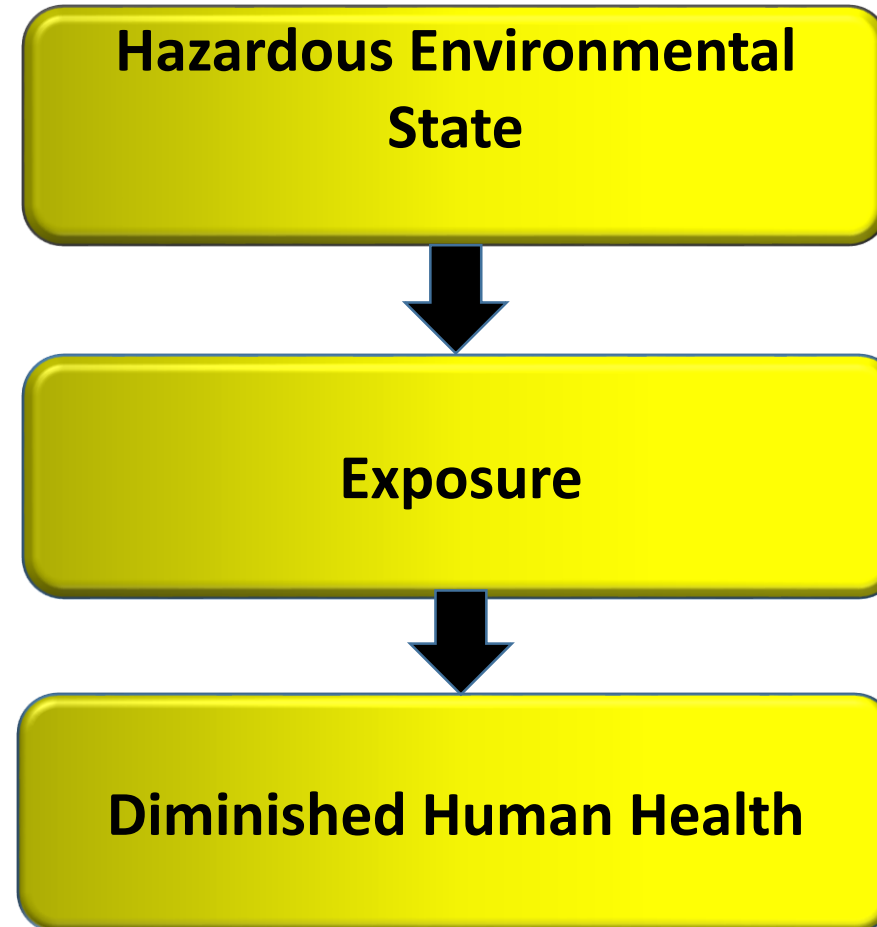
Narrow, Hazard-Focused and Compartmentalised........
But often quite useful!
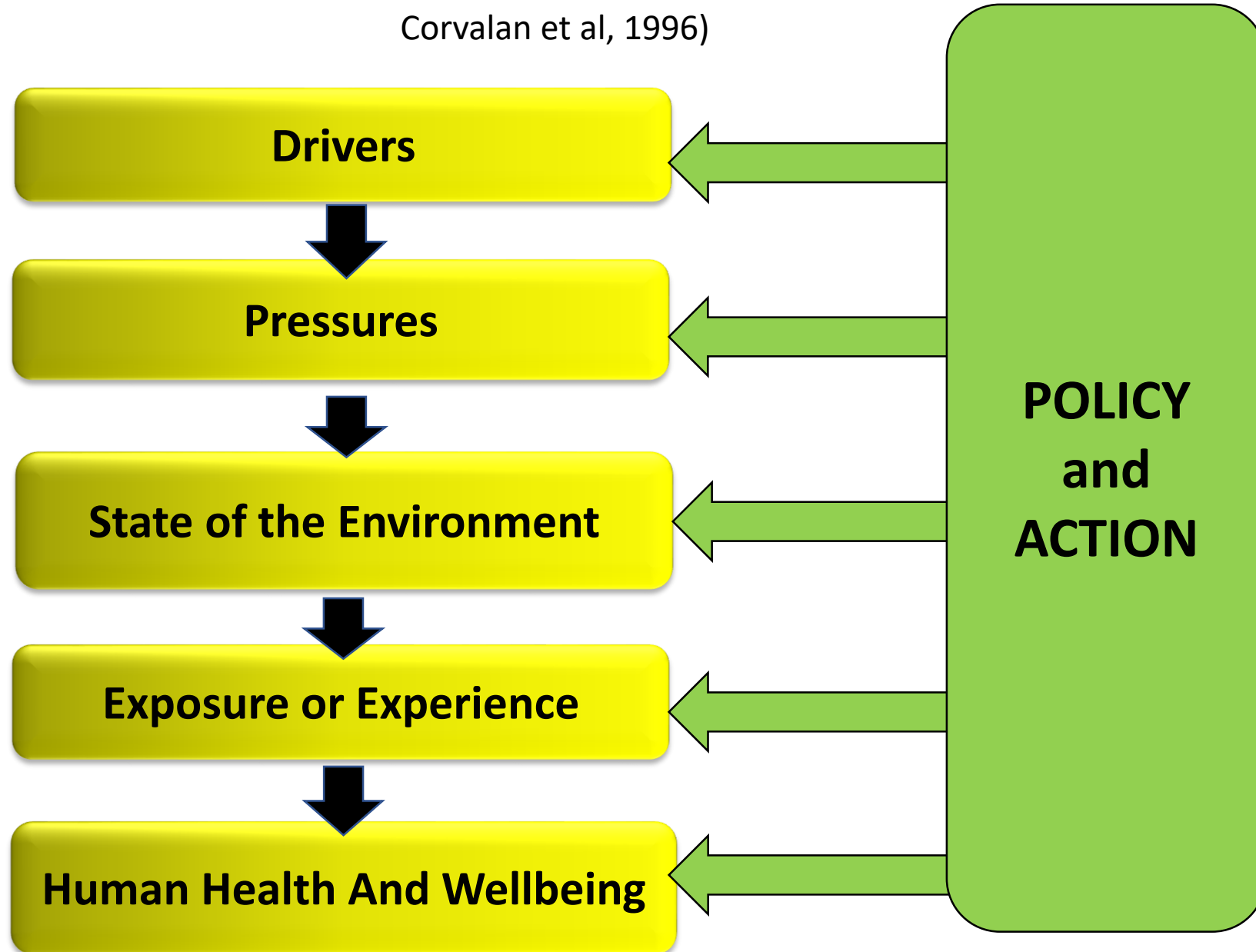
Some improvements seemed self evident and long overdue

Hazardous Environment State
or
Environmental "Good"

↓

Exposure or Experience

↓

Modified Health and
Wellbeing

We also felt "full chain" approach would be more realistic and would be more unifying
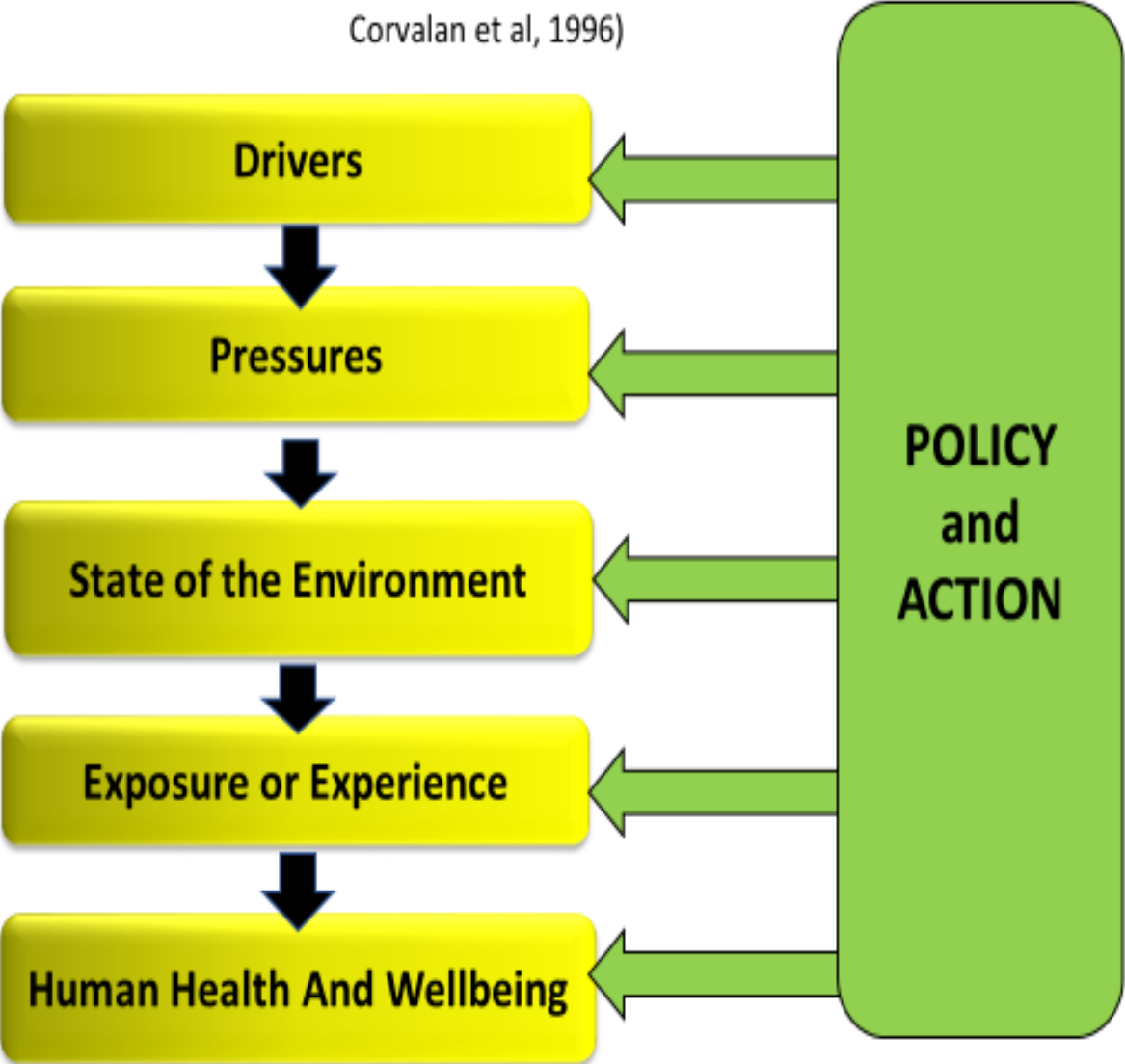
The DPSEEA Model

Corvalan et al, 1996)

Drivers

Pressures

State of the Environment

Exposure or Experience

Human Health And Wellbeing

POLICY and ACTION

The DPSEEA Model

Corvalan et al, 1996)

The modified DPSEEA Model

(Morris et al, 2006)

Drivers

Pressures

State of the Environment

POLICY and ACTION

Exposure or Experience

Human Health And Wellbeing

Social, economic & environmental etc. context
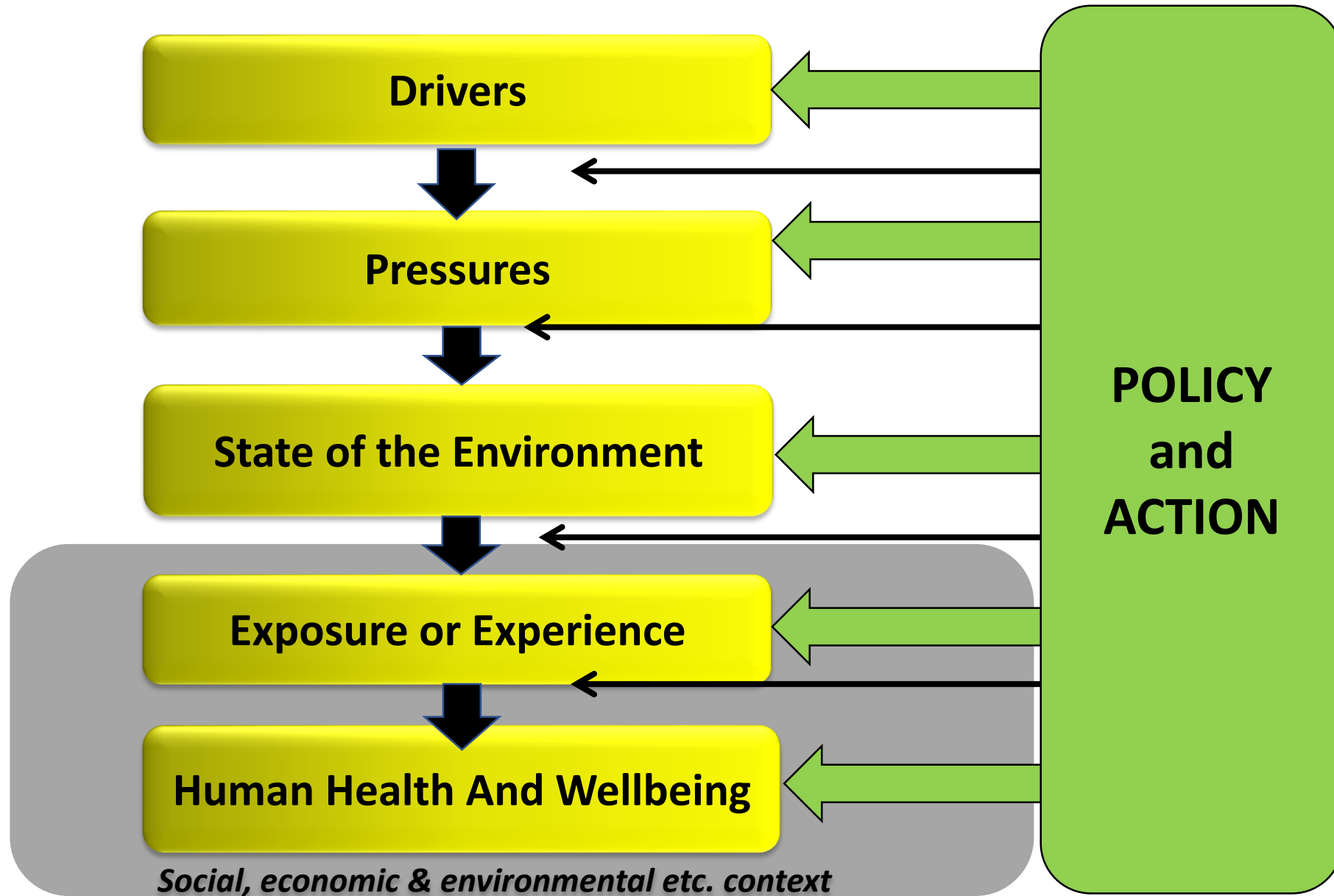
The modified DPSEEA Model

(Morris et al, 2006)
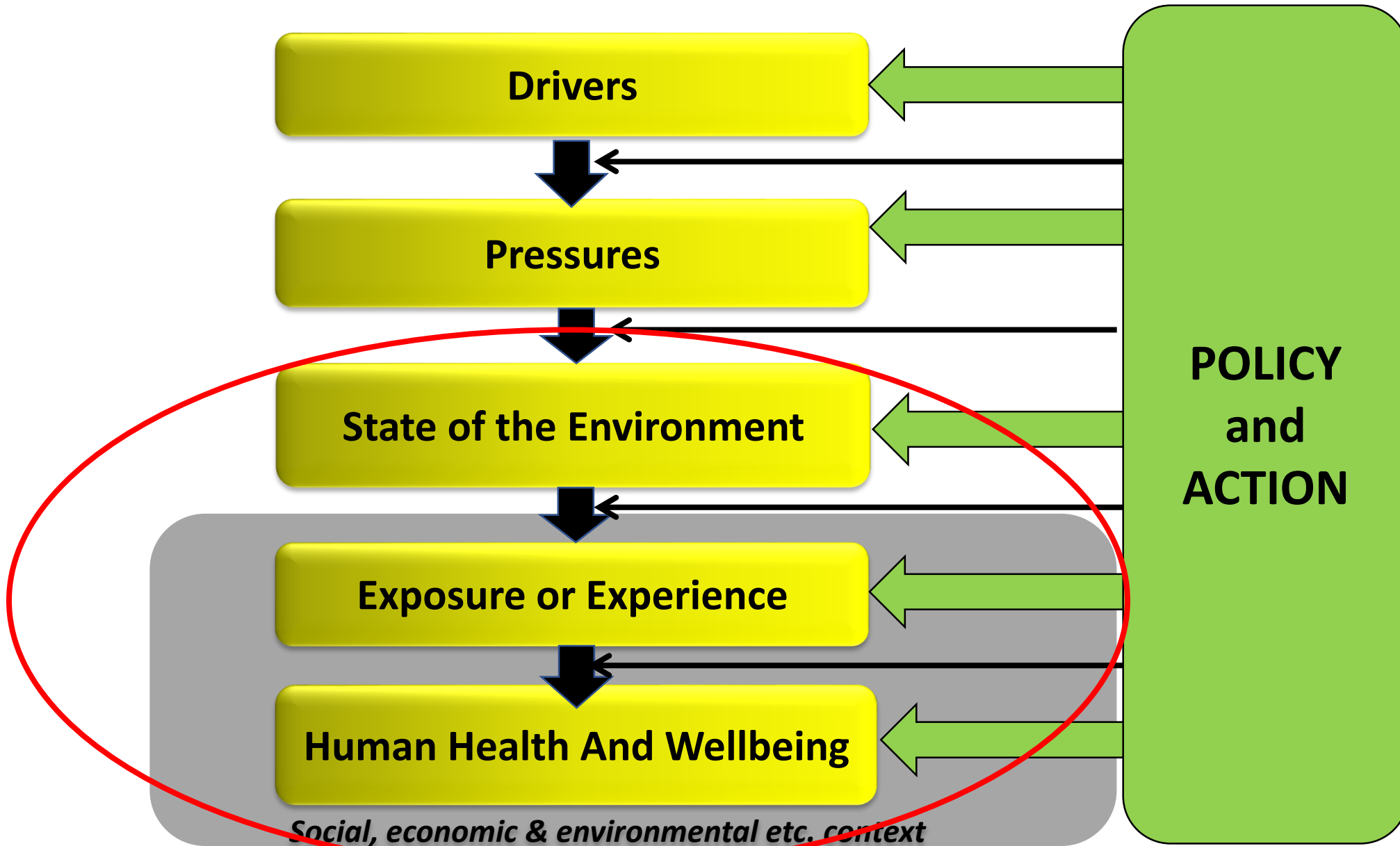
"Essentially, all models are wrong, but some are useful"

George Edward Pelham Box FRS
(1919 – 2013)

In multiple stakeholder groups we created "maps of the environmental public health territory". Our model became our

- framework in which to assemble evidence from different sources

- potential configuring framework for an information system

- framework for policy analysis

OUR "TOOL TO THINK WITH"

GOOD PLACES, BETTER HEALTH

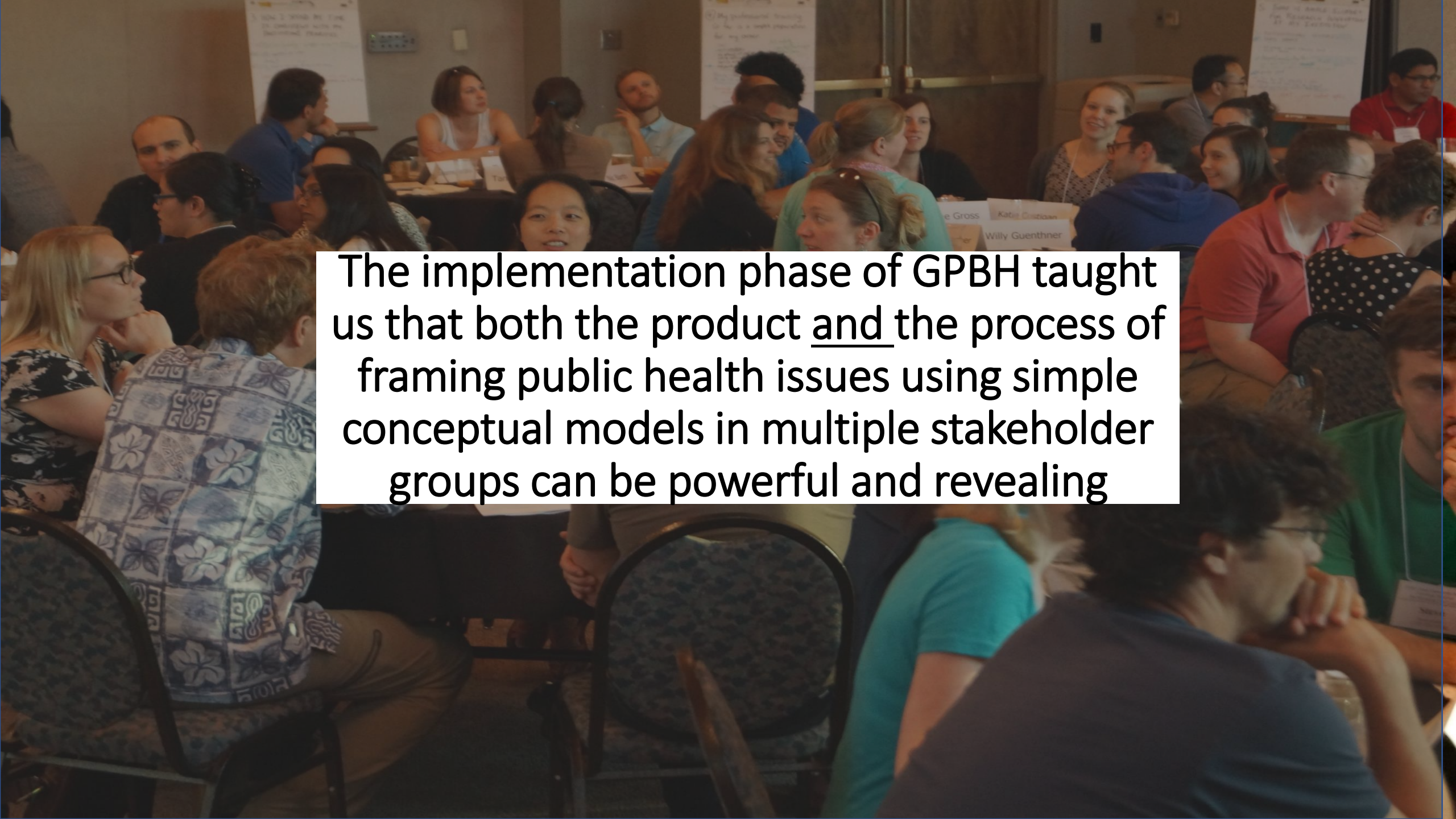**A NEW APPROACH TO ENVIRONMENT AND HEALTH IN SCOTLAND**

IMPLEMENTATION PLAN

The Scottish Government

In its 3 year implementation phase (commencing in 2008) GPBH focused on the environmental determinants of health and inequity in health of Scotland's children (< 9 years. Specifically:

- Asthma
- Obesity
- Unintentional Injuries
- Mental Health and Wellbeing

The implementation phase of GPBH taught us that both the product <u>and</u> the process of framing public health issues using simple conceptual models in multiple stakeholder groups can be powerful and revealing

**Good Places,
Better Heath
for Scotland's
Children**

**Prepared by the Evaluation Group of
Good Places Better Health**

Published in 2011, it contained
10 recommendations concerning
the creation and maintenance
of Good Places for Scotland's Children

TOPPING A LIST WAS A DESIRE TO SEE A "SCOTTISH NEIGHBOURHOOD QUALITY STANDARD" COVERING 11 KEY AREAS

Good Places, Better Heath for Scotland's Children

Prepared by the Evaluation Group of Good Places Better Health

1. HOUSING
2. GREENSPACE PROVISION AND QUALITY
3. OUTDOOR SPACE FOR PLAY
4. OPPORTUNITIES FOR CONTACT WITH NATURE
5. PRESENCE OF CHILDREN OUTDOORS
6. LOCAL AMENITIES
7. COMMUNITY SAFETY
8. SOCIAL CAPITAL WITHIN A COMMUNITY
9. QUALITY, MAINTENANCE AND CLEANLINESS OF STREETS AND PUBLIC SPACES
10. COMMUNITY FACILITIES
11. TRANSPORT

The Scottish Government

What did we come to understand about place that isn't captured by physical environment?

- **Place, as a concept, unites the physical, social, economic, cultural and historical dimensions of a location. It is the part of people's life circumstances that is related to where they are**

- **Children who grow up in adverse places are more likely to endure shortened, unhealthy and problematic adult lives**

What did we come to understand about the place that isn't captured by physical environment?

- **Social, economic and housing systems group similar sorts of people together in one place, who then contribute to reproducing adverse places through their social, economic and behavioural problems**

- **In contrast, good places are more likely to produce healthy, happy productive people who, in turn collectively reproduce good places**

Place is thus the site and system by which society, the economy and health gets reproduced generation to generation

However, public health and society as a whole must now come to terms with Ecological Transition

There is an urgent requirement to build public health, henceforth, on ecological principles......

ECOLOGICAL PUBLIC HEALTH
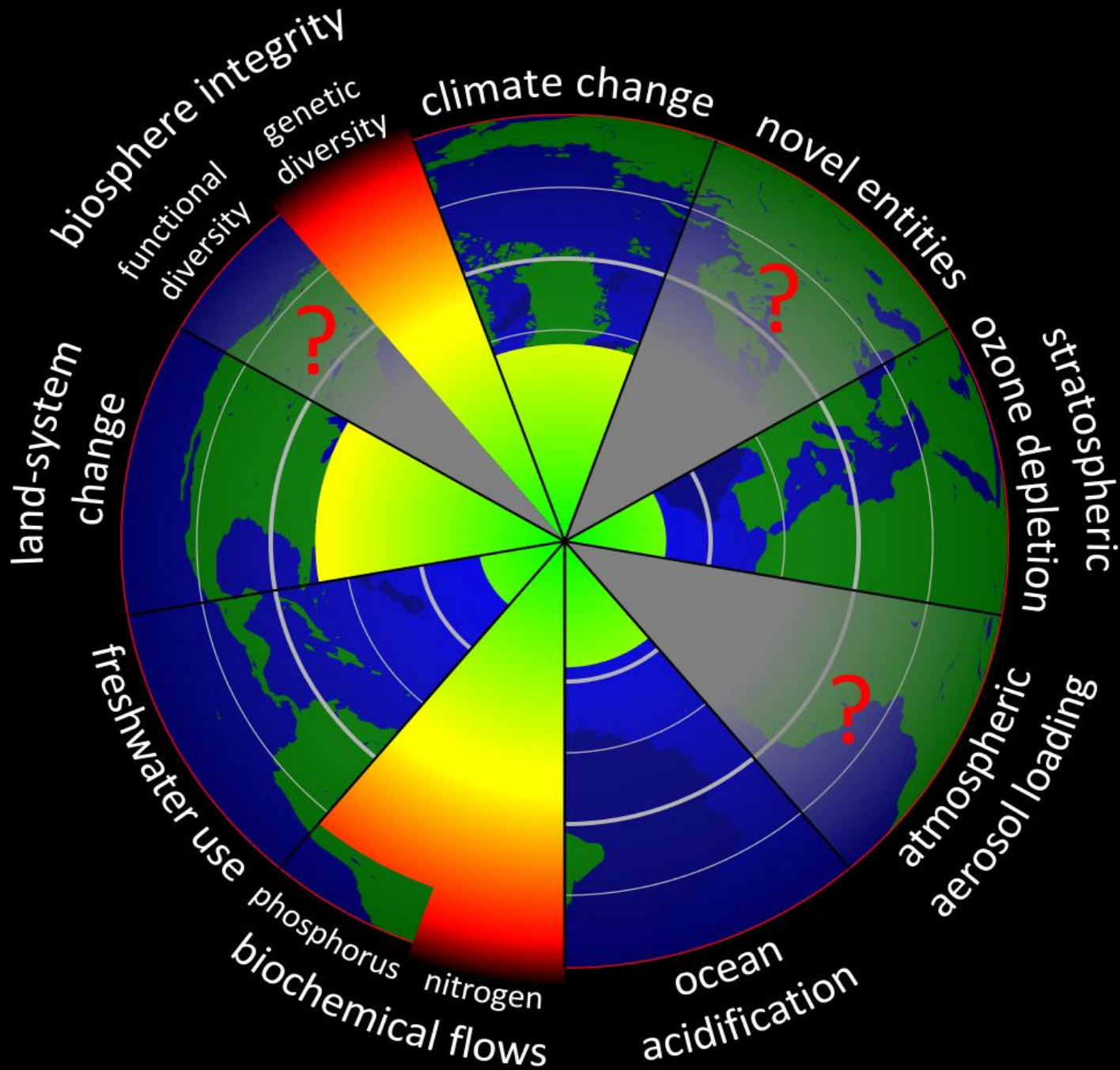
To keep Earth hospitable
we need to live within
9 specific limits

Planetary Boundaries
An Earth Systems framework

Sreffen et al (2015)

Biophysical Subsystem/Process	Boundary	Where we are today
Climate Change	Atmospheric concentrations of carbon no more than 350 ppm	400 ppm and climbing
Lost biodiversity as species become extinct	Maintain 90% of biodiversity	Dropped to 84% in parts of the World e.g. Africa
Addition of phosphorous, nitrogen and other elements to the world's crops and ecosystems	Worldwide use per year of about 11 megatonnes of Phosphorous and 62 megatonnes of Nitrogen	Up to about 22 megatonnes of Phosphorous and 150 megatonnes of Nitrogen
Deforestation and other land use changes	Maintain 75% of the worlds original forests	Down to about 62%

THE DYNAMICS OF ECOLOGICAL PUBLIC HEALTH:
A SIMPLE MODEL

HUMAN
HEALTH

ECOSYSTEMS
HEALTH
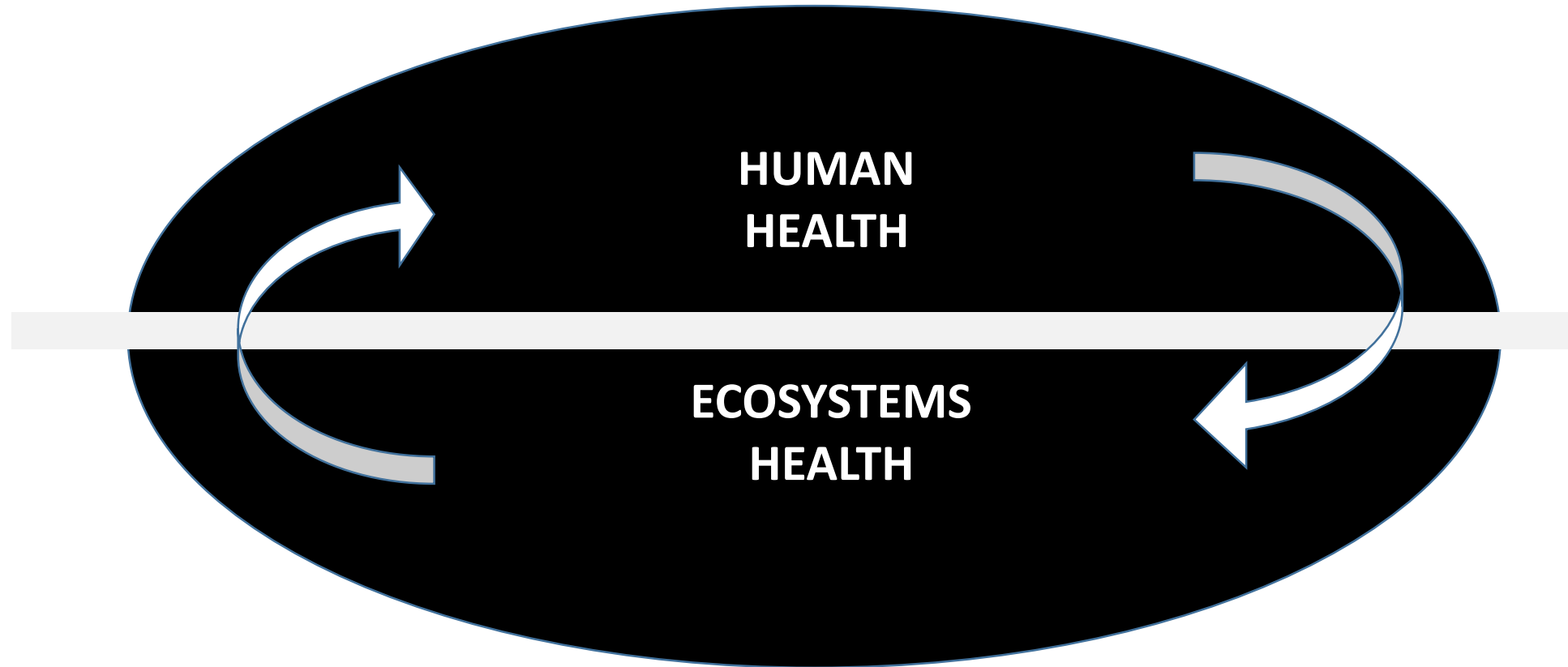
Rayner and Lang (2012)

THE IMPLICATIONS ARE SIGNIFICANT

- Society can no longer hope to deliver health, wellbeing, health care (and equity in these things) without a radical rethink. Part of this must be a return to an environmental conceptualisation of the whole public health project.

- Public health must think and act on a vastly extended temporal and spatial scale.

- The only logical conceptualisation of public health going forward is an environmental conceptualisation

- Those of us concerned with the relationship between environment, health and wellbeing must embrace a distal dimension to their work.

"While the new environmental conception of health, "Ecological public health" may seem a difficult and complex task that us now the 21ˢᵗ century's unavoidable task"

Rayner and Lang, 2012

In the language of our conceptual model, we must consider
2 Pathways from human-driven
Environmental Change to Human Health and Wellbeing

Here and Now

Then and There

A PROXIMAL PATHWAY

A DISTAL PATHWAY

DRIVERS

HUMAN HEALTH AND WELLBEING

THE ECOSYSTEMS ENRICHED DPSEEA MODEL
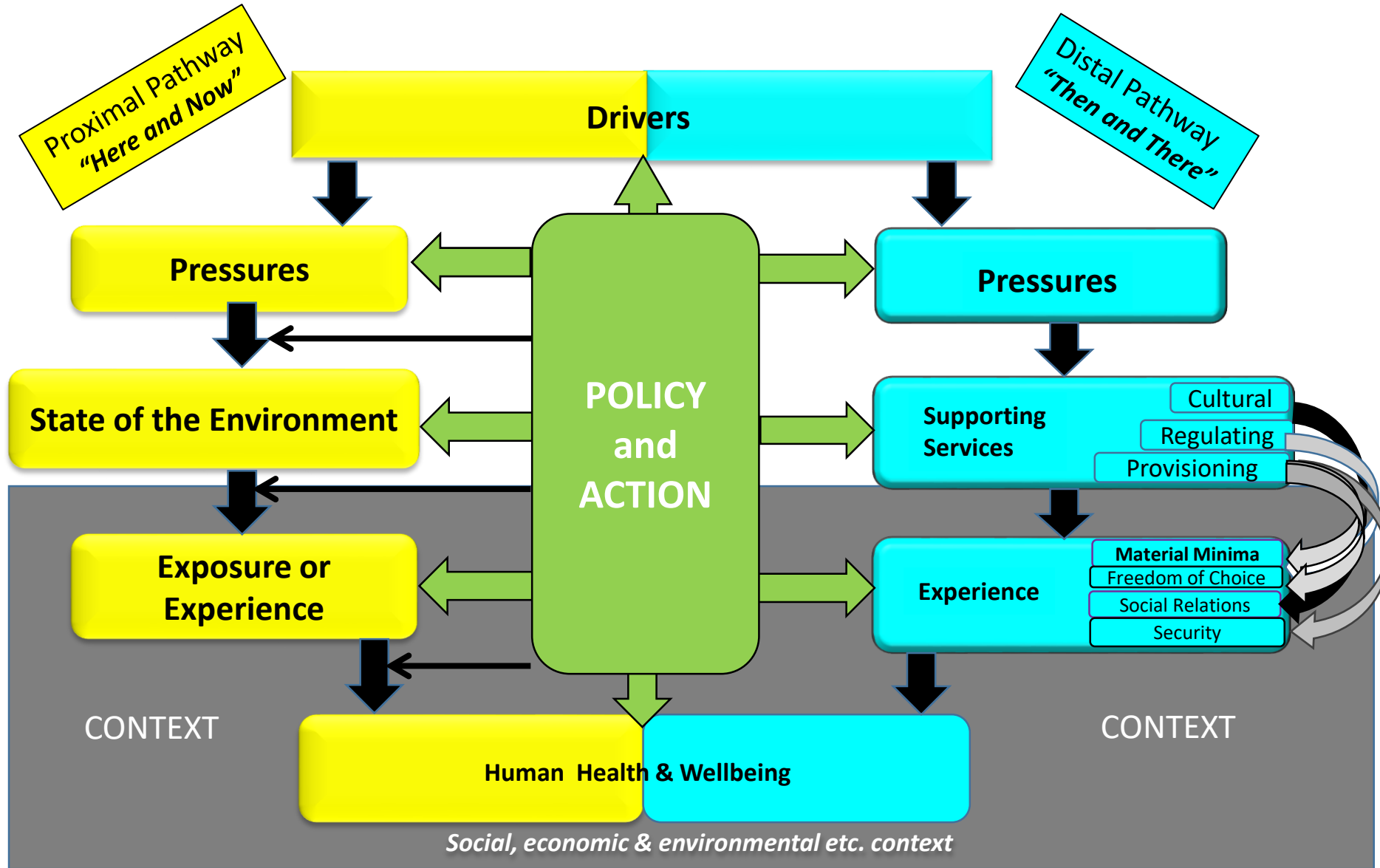
The Ecosystems Enriched DPSEEA Model [incorporating both social and ecosystem services dimensions (Reis, S, Morris G, Beck, S. et al, 2015) as subsequently expanded (EEA, 2015)]

Some concluding thoughts

- Just as in the 19th century, Places especially towns and cities are the frontline in the battle to achieve the triple win

- Ironically, a new environmental conception seems more likely to be founded on notions of healthy places than on physical environment alone

- The pursuit of healthier, more equal and more sustainable places is quintessentially multidisciplinary – it is co-creation 'writ large'

- The place standard is part of the toolbox which allows us to navigate in complexity to deliver better health

- Creating a healthy place can never be not a 'one off' exercise

Morris, Racioppi, Matic, Martuzzi