

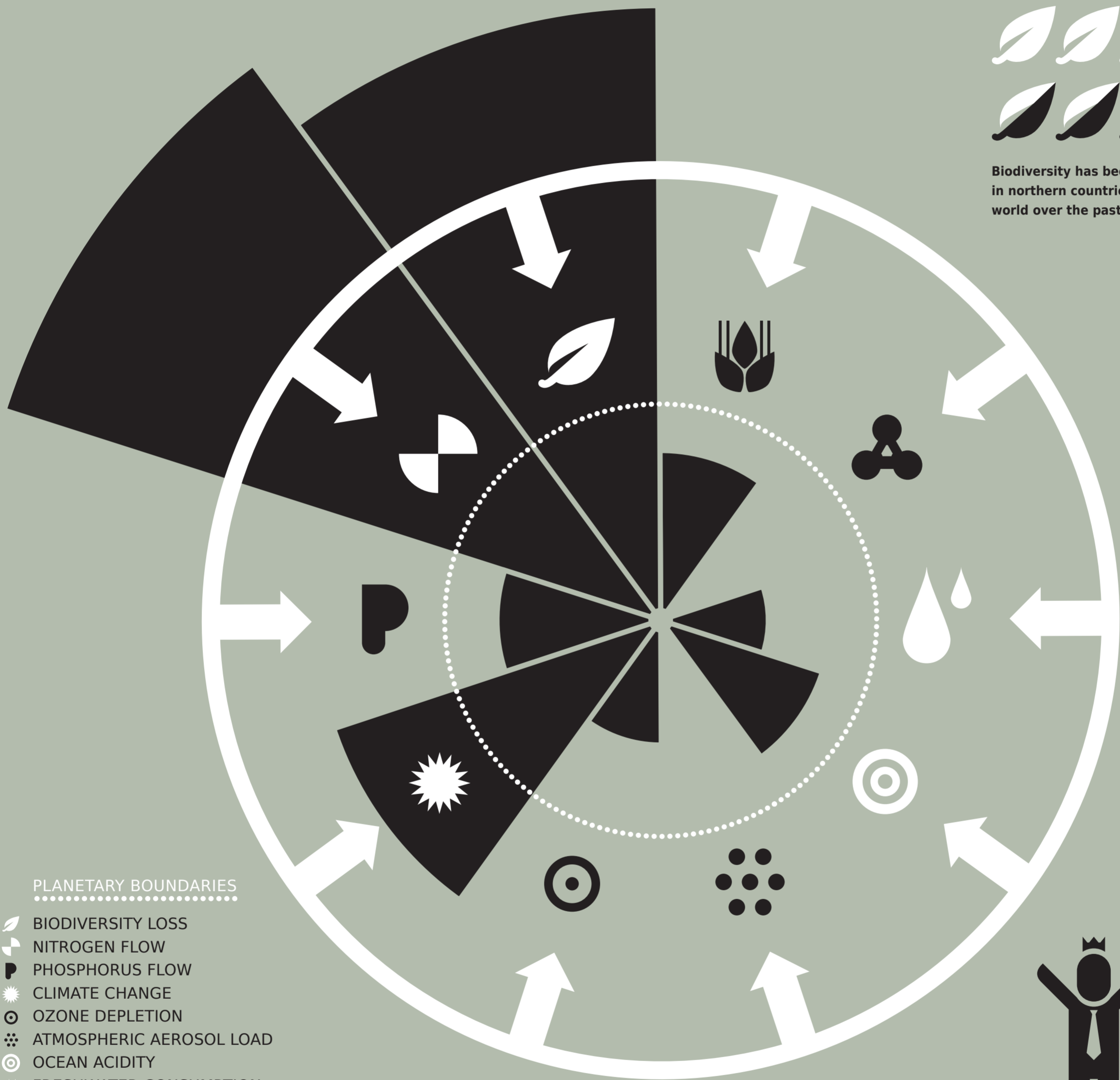
# ECOLOGICAL AUDIT OF DEVELOPMENT

THE BALANCE SHEET FOR  
GROSS GLOBAL PROSPERITY

The Earth's ability to provide an accommodating environment is undermined by our activities. The Earth is our life-supporting system. Despite this basic fact, measured in biophysical terms, the planet is shrinking due to human interventions. Over the past forty years the Living Planet Index (an indicator of the state of biodiversity) has fallen by 30% in northern countries and fallen by 60% in the tropics. During this time there has been a doubling of demands on natural systems. Assessing the capacity of the ecological system to continue to provide favorable conditions for civilization must be part of an audit of development.



Biodiversity has been fallen by a rate of 30% in northern countries and 60% in the tropical world over the past 40 years.



PLANETARY BOUNDARIES

- BIODIVERSITY LOSS
- NITROGEN FLOW
- PHOSPHORUS FLOW
- CLIMATE CHANGE
- OZONE DEPLETION
- ATMOSPHERIC AEROSOL LOAD
- OCEAN ACIDITY
- FRESHWATER CONSUMPTION
- CHEMICAL POLLUTION
- AGRICULTURAL LAND USE



97-98% of scientists agree climate change is caused by humankind



2/3 ecosystems are exploited beyond their capacity



Ecological systems have thresholds that can lead to sudden collapse. Nine planetary boundaries are central to avoid crossing critical tipping points. Three boundaries have already been transgressed: climate change, the rate of biodiversity loss and the global nitrogen cycle. The Anthropocene is a new geological age

characterized by dynamics where our industrial patterns are a force dramatically effecting natural, biophysical and geological processes. The Earth is the foundation for substance, but an ecological audit indicates that the model of development is now so dysfunctional that human survival is at stake.