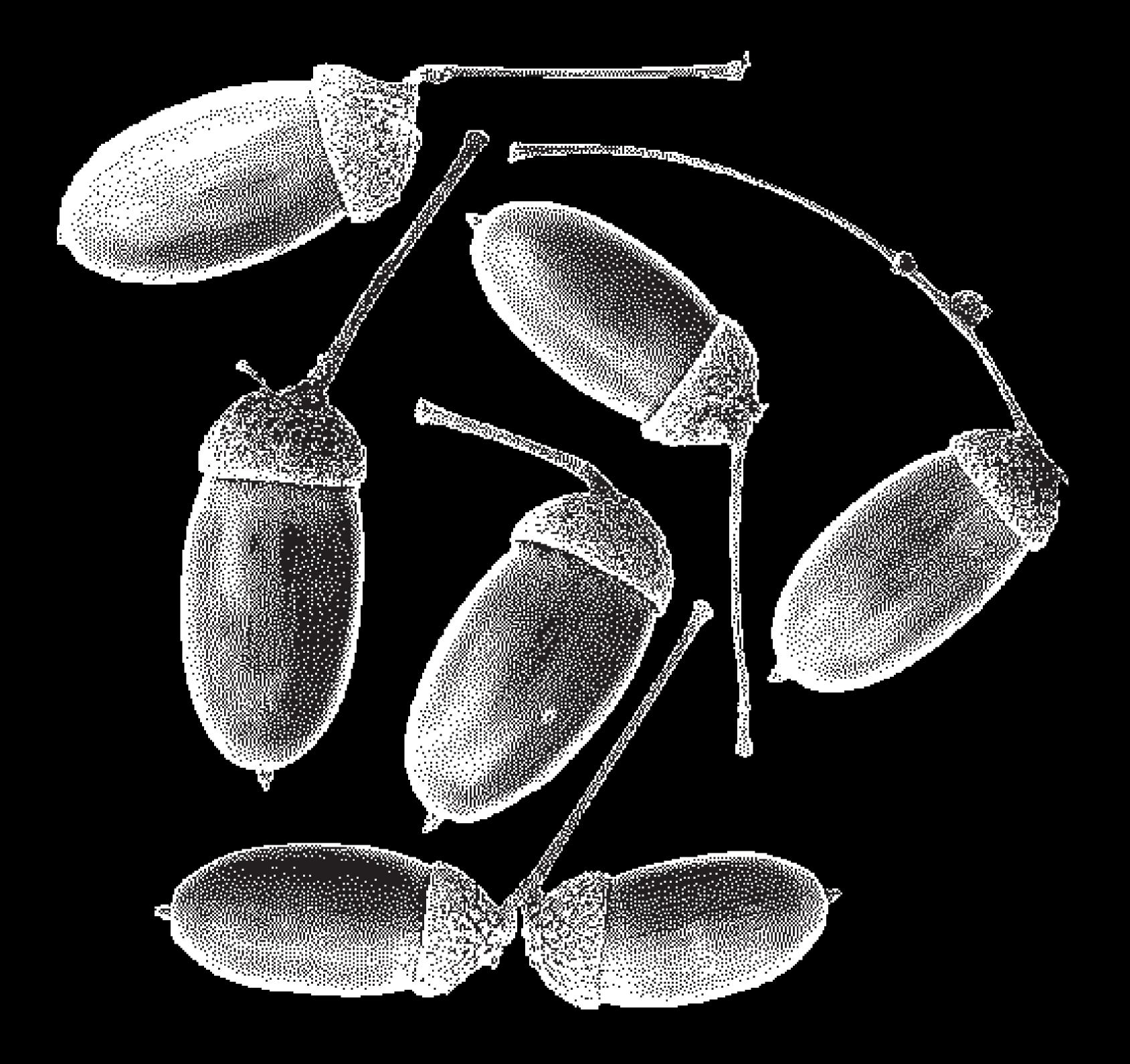
## THE SEVENTH GENERATION PRINCIPLE



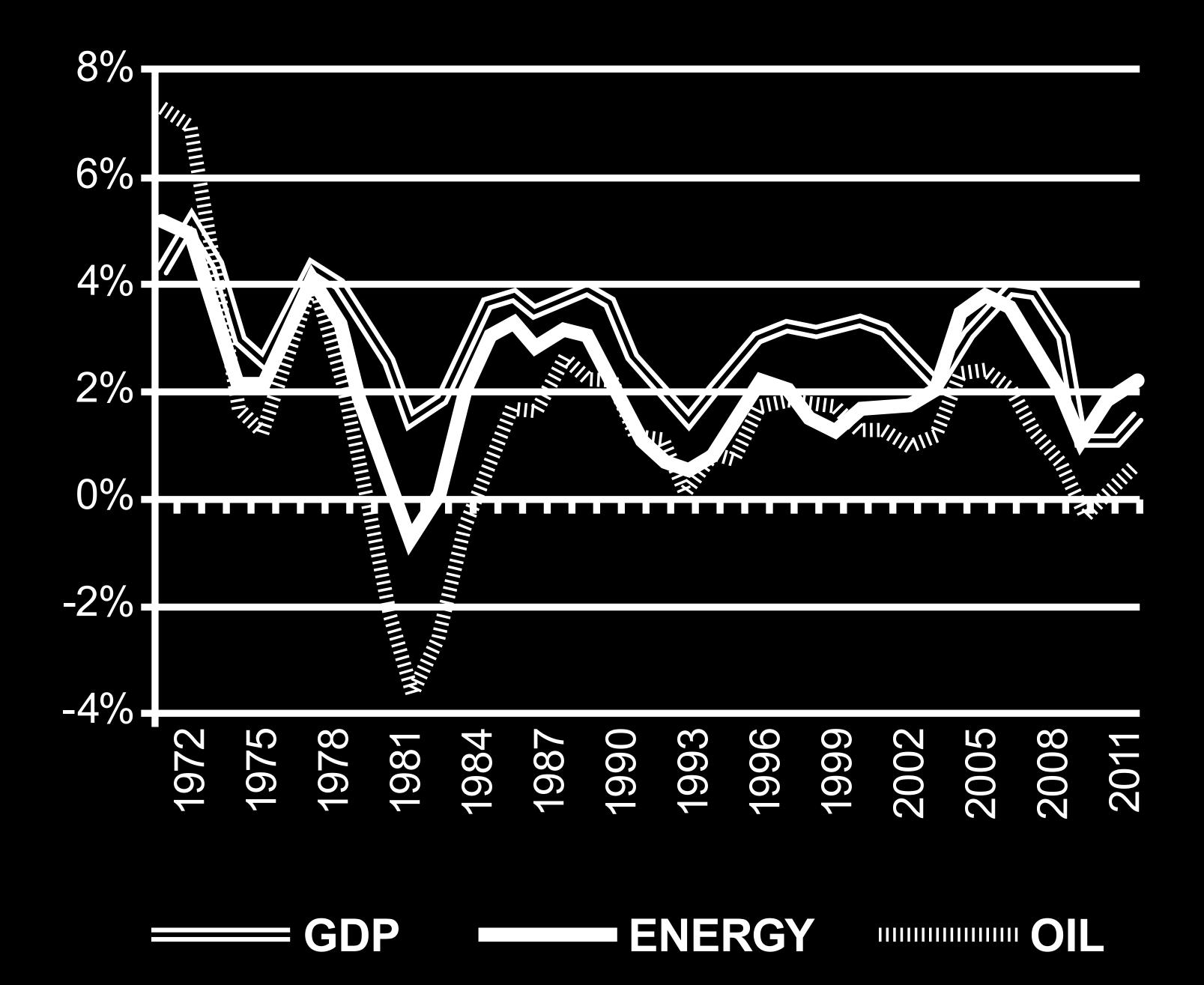
## ACCORDING TO IROQUOIS WISDOM, IN EVERY DELIBERATION, BE IT PERSONAL OR COLLECTIVE, WE MUST CONSIDER

#### **HOW IT WILL AFFECT OUR DESCENDANTS**

#### **SEVEN GENERATIONS INTO THE FUTURE.**

## ENVIRONMENT, ENERGY, ECONOMY LINK

## WORLD GROWTH IN GDP, ENERGY AND OIL

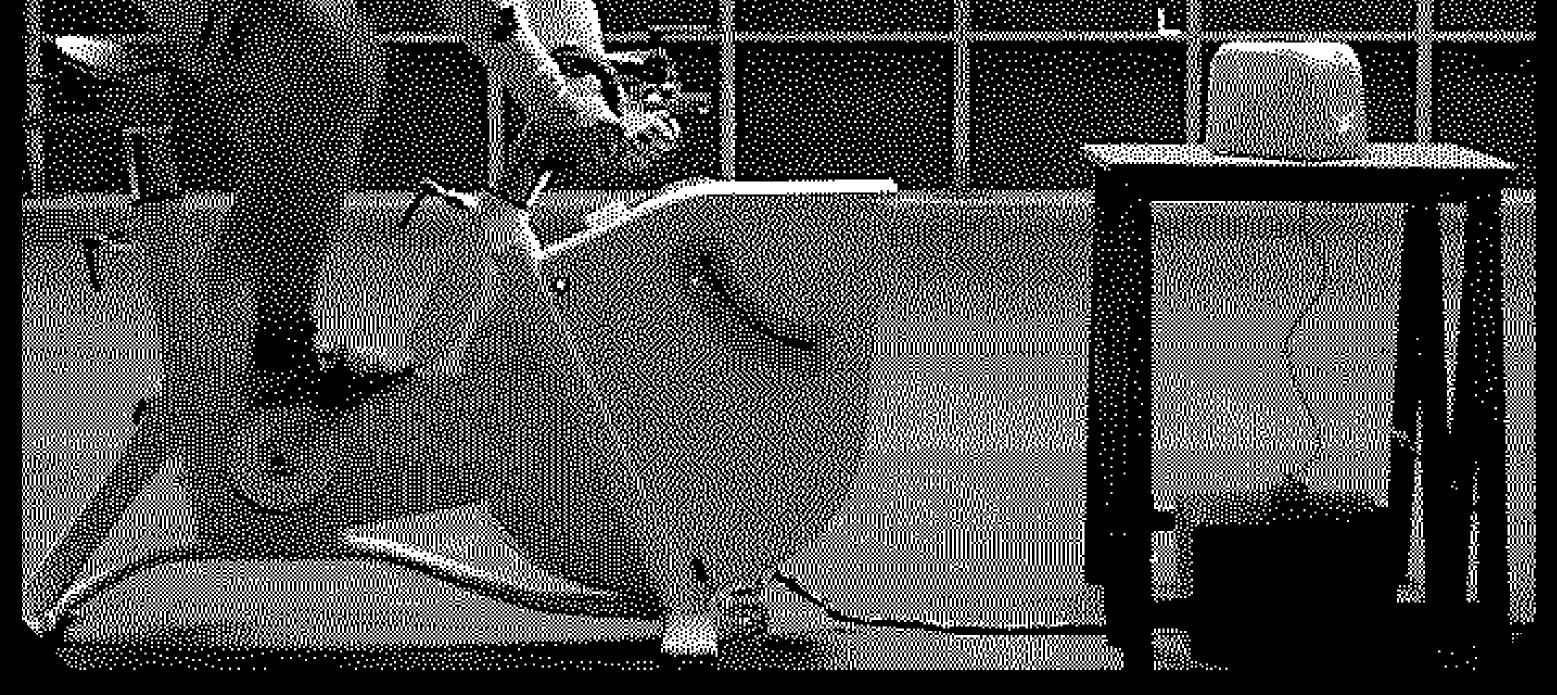


CONTEMPORARY EXPONENTIAL ECONOMIC ACTIVITY IS DIRECTLY TIED TO ENERGY CONSUMPTION,

#### WHICH IN TURN IS DIRECTLY CORRELATED

#### **TO ENVIRONMENTAL CHANGE.**

## ENERGY SLAVE



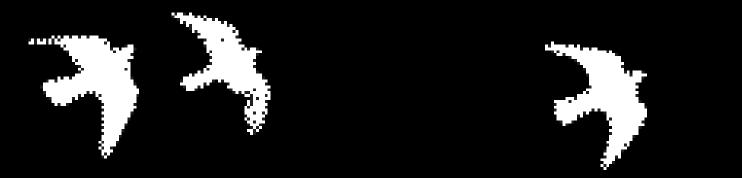
AN ENERGY MEASURE ALLOWING TO COMPARE THE ENERGY CONSUMPTION REQUIRED FOR THE OPERATION OF

### **A MACHINE OR INFRASTRUCTURE, TO THE**

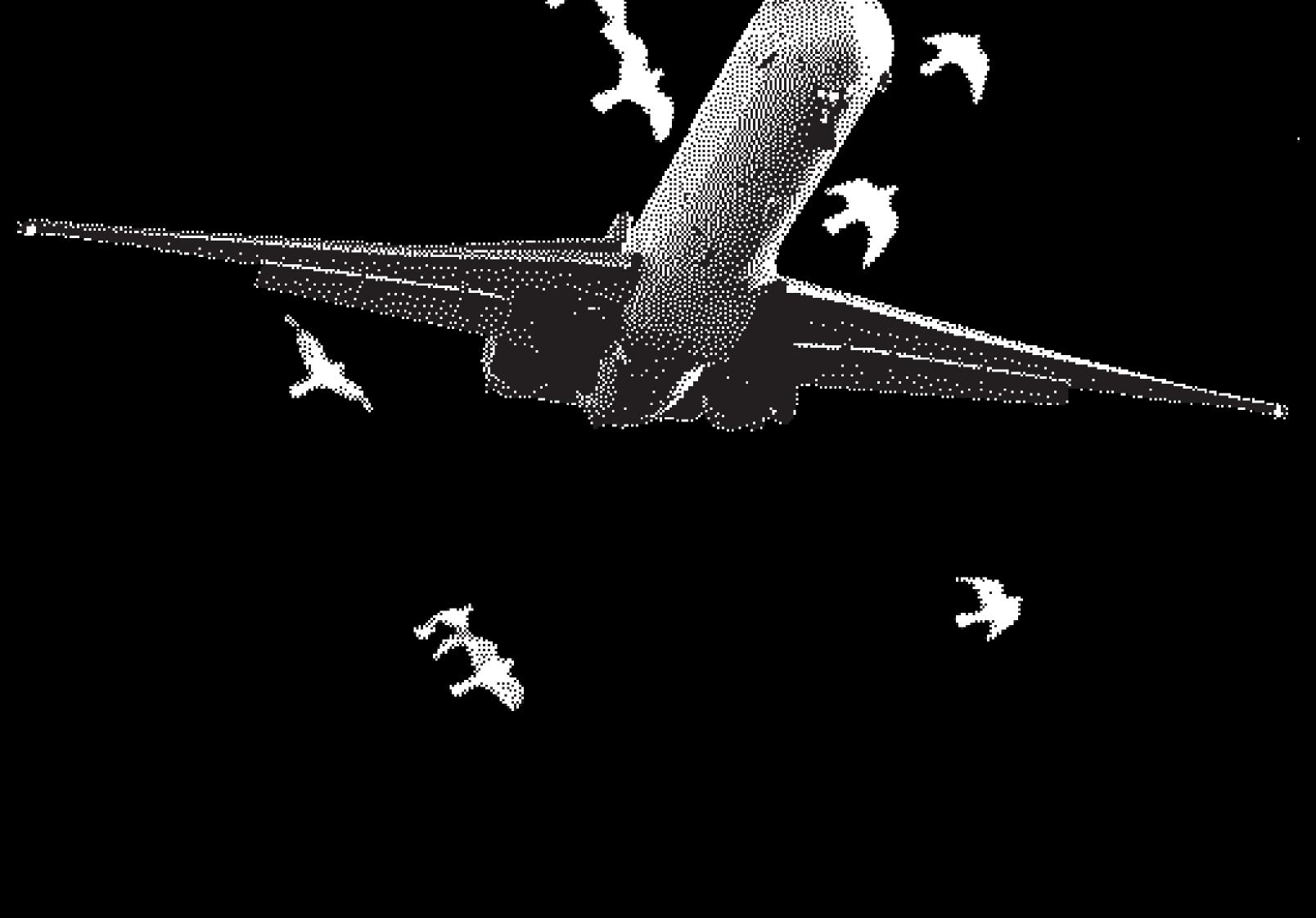
## PHYSICAL WORKING CAPACITY OF AN ADULT.

## INTERSPECIES COMMONS







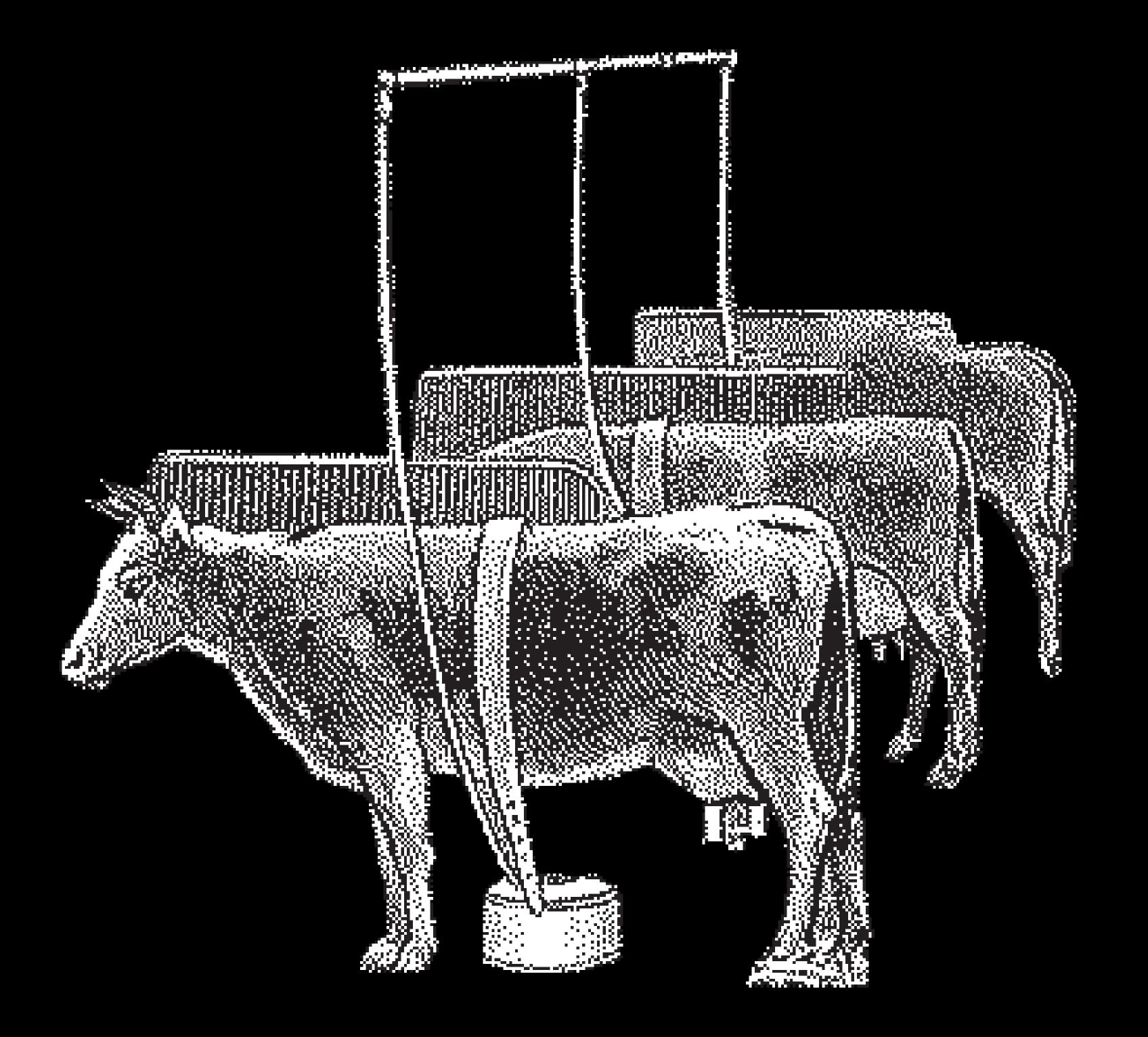


## **RESOURCES SHARED AND MAINTAINED**

### **COLLECTIVELY BY A HUMAN**

### **AND NON-HUMAN COMMUNITY.**

## INTERSPECIES WEALTH TRANSFER



## POPULATION GROWTH AND RISING LIVING STANDARDS IN INDUSTRIALISED SOCIETIES

#### **COME AT THE EXPENSE OF BIODIVERSITY**

#### AND THE QUALITY OF LIFE OF OTHER SPECIES.

## THERE HAS NEVER BEEN AN ENERGY TRANSITION

SOLAR, WIND...
HYDROELECTRIC
NUCLEAR
COAL
NATURAL GAS
CRUDE OIL

1965

### GLOBAL PRIMARY ENERGY CONSUMPTION (MILLION TONNES OIL EQUIVALENT)

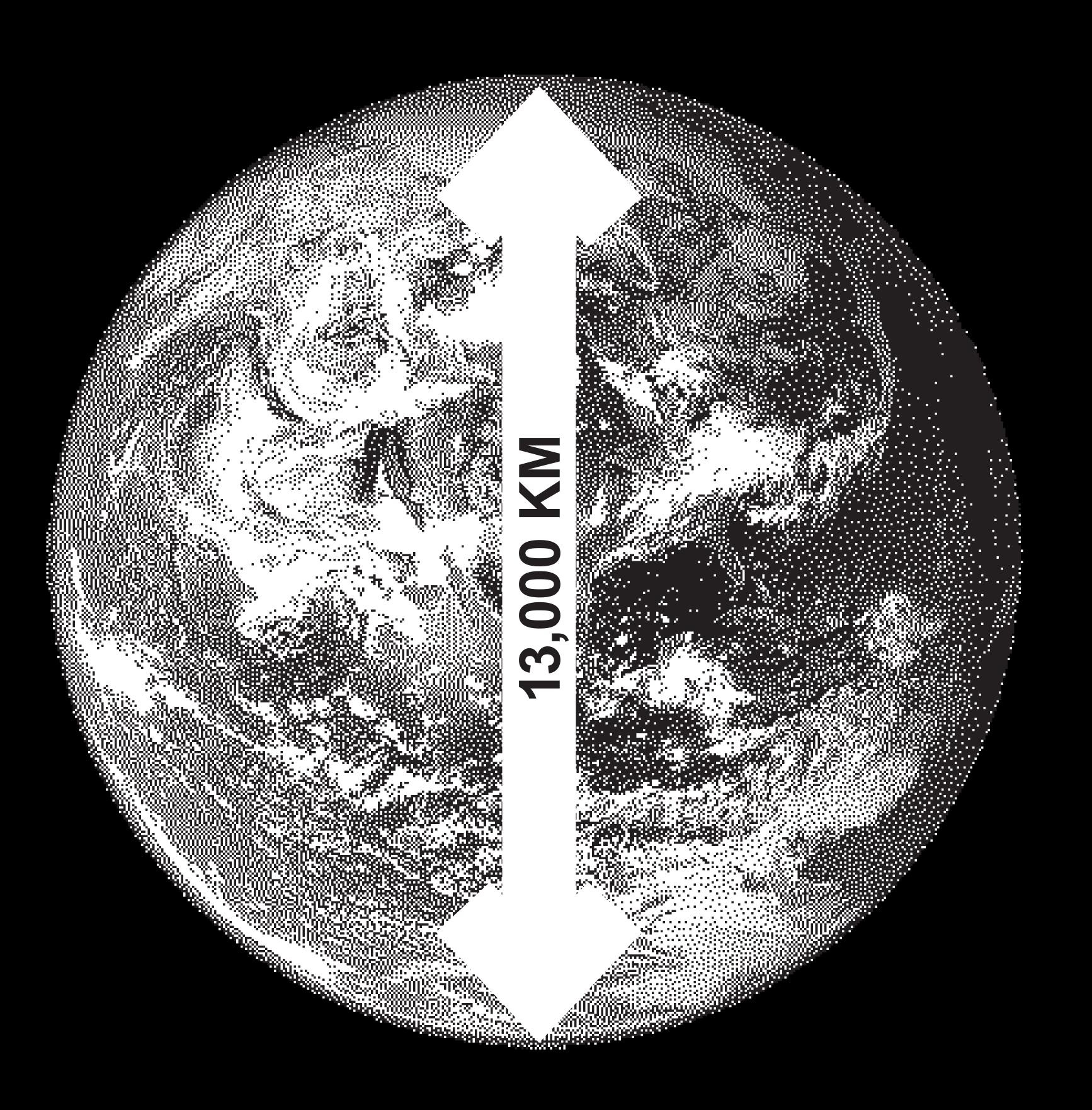
## 2017

## **HISTORICAL CHANGES IN ENERGY**

#### **RESOURCES HAVE ESSENTIALLY ALWAYS BEEN**

#### **ENERGY ADDITIONS, NOT TRANSITIONS.**

# PLANETARY BOUNDARIES



## A SET OF PLANETARY BOUNDARIES WITHIN

#### WHICH HUMANITY CAN CONTINUE TO DEVELOP

### AND THRIVE FOR GENERATIONS TO COME.

## 



#### **IMPOVERISHED BIOLOGICAL** SIMPLIFIED AND А

## MODEL DEVELOPED TO PUT THE PLANET

## AND ITS RESOURCES TO INTENSIVE WORK.

# TRUE COST MARKET



## AN ECONOMY THAT INCLUDES THE COST

#### **OF NEGATIVE EXTERNALITIES**

### **ASSOCIATED WITH GOODS AND SERVICES.**

## ZOMBIE ENERGY

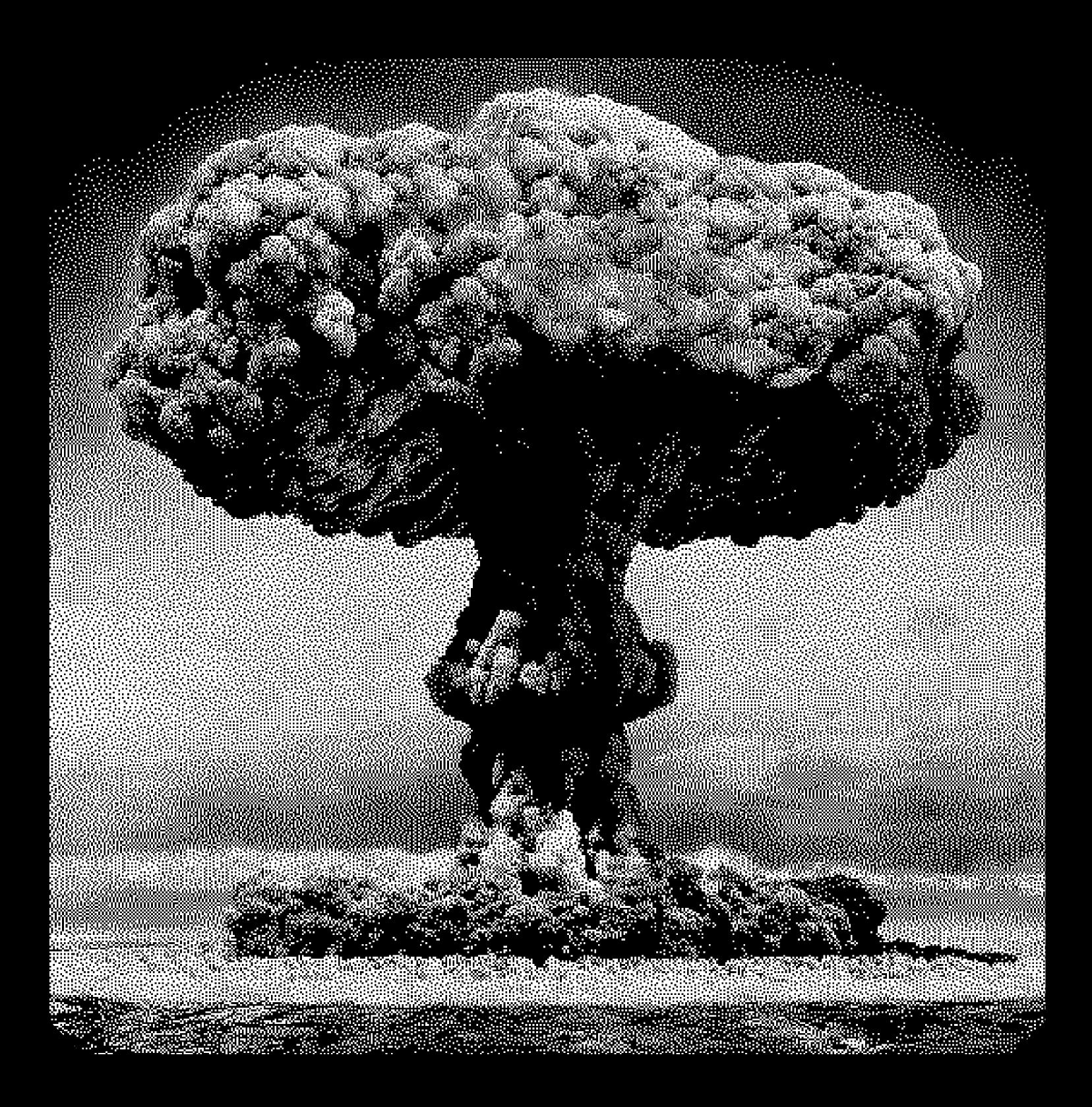


## MODERN SOCIETY'S STOCK OF MACHINES IS ANIMATED BY LONG-DEAD INORGANIC ENERGY (IN THE FORM OF COAL, OIL OR GAS).

## FOSSIL (DEAD) ENERGY THREATENS

### TO DESTROY THE BIOSPHERE.

## **GLOBAL ARTIFICIALITY**

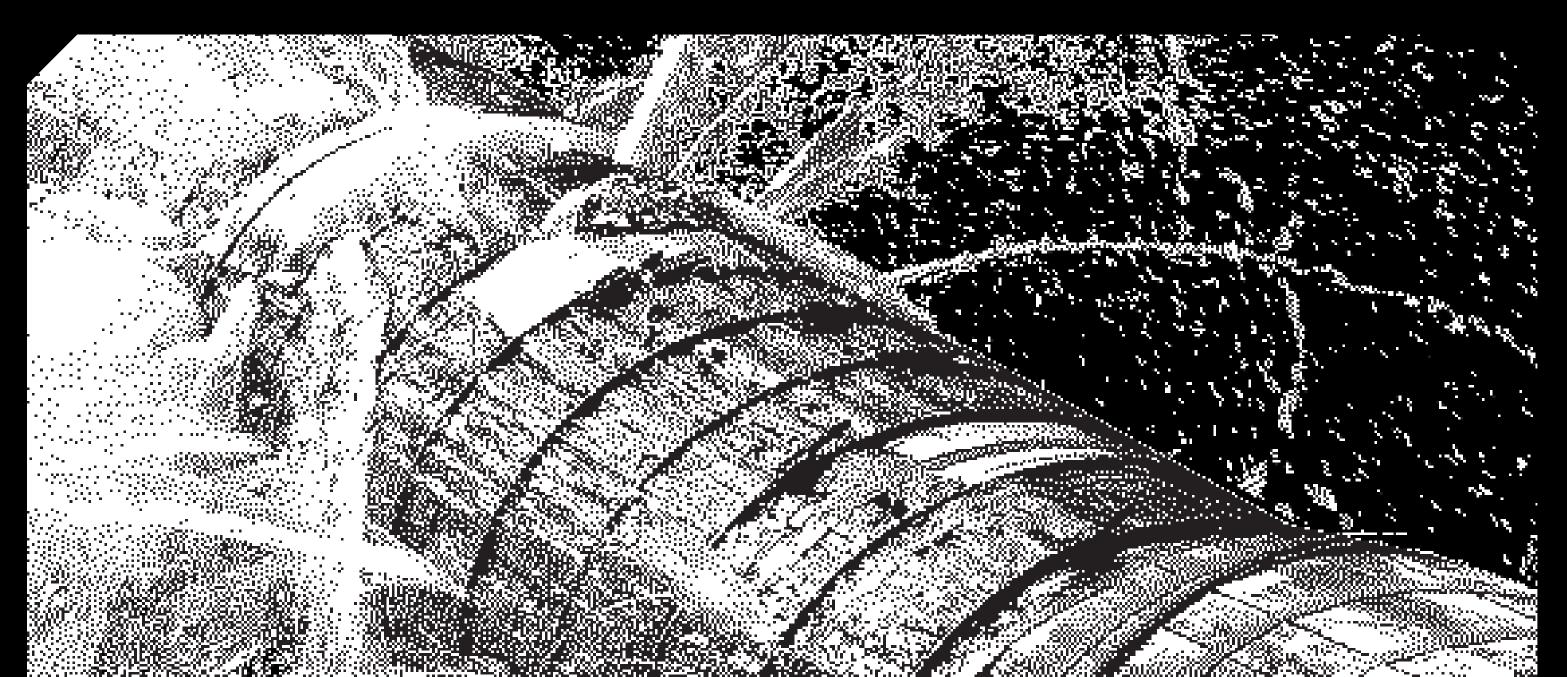


## THE ARTIFICIALIZATION THAT RESULTS FROM HUMAN ACTIVITY IS OMNIPRESENT AND GLOBAL (NUCLEAR ISOTOPES,

### **COMPOSITION OF THE ATMOSPHERE**,

## CELL STRUCTURE, PLANTATIONS, ETC.).

## BROKEN WORLD THINKING



## INVITES US TO THINK ABOUT THE WORLD FALLING APART AS AN OPPORTUNITY TO COME INTO RELATIONSHIPS OF CARE, REPAIR



### **MAINTENANCE (RATHER THAN MERELY**

## **NOVELTY AND INNOVATION).**

## COLLAPSE INFORMATICS

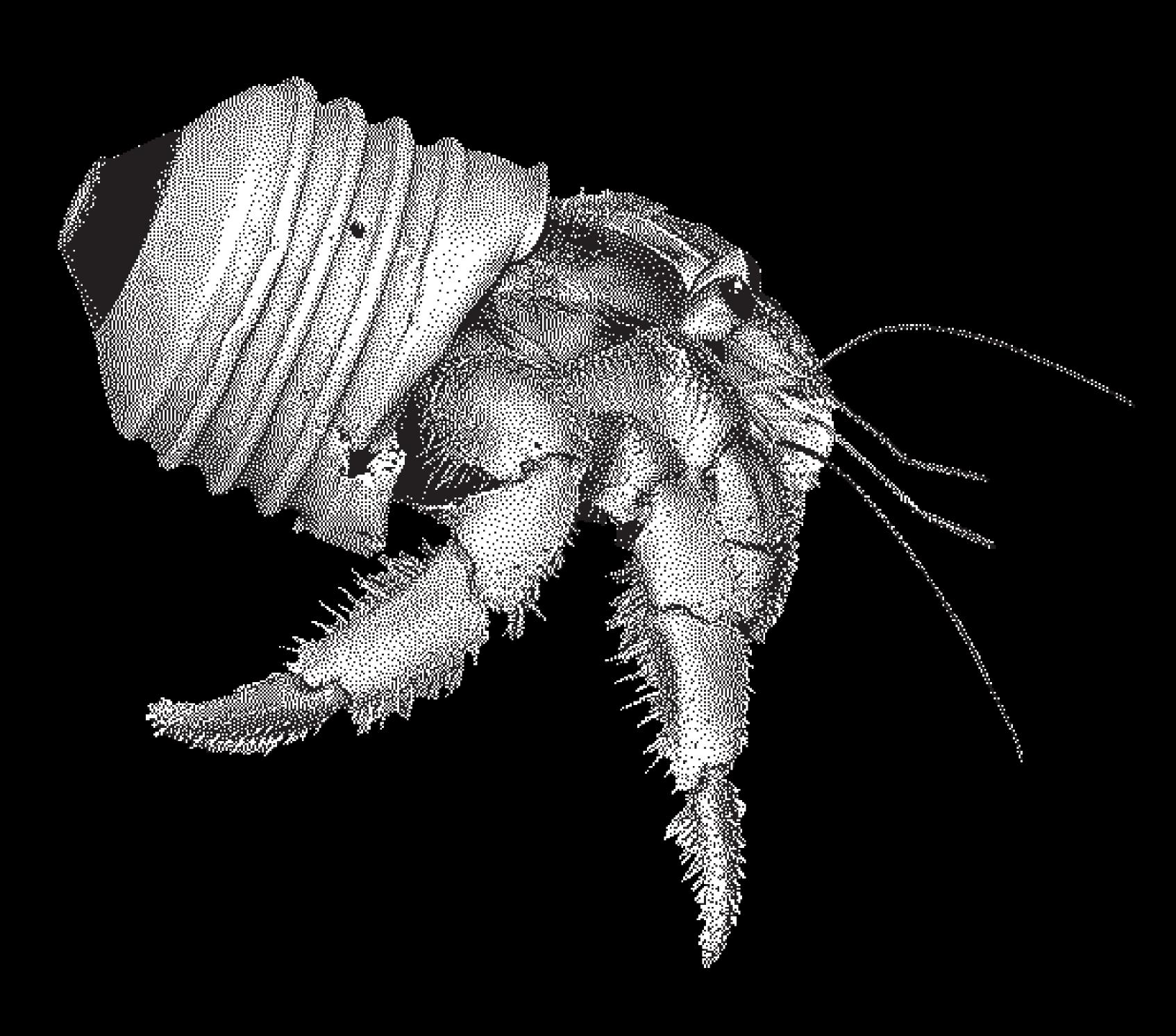


## NOW THAT COMPUTING IS AS CHEAP AND ACCESSIBLE AS EVER, IT'S TIME TO STUDY, DESIGN AND DEVELOP SYSTEMS

#### IN THE ABUNDANT PRESENT

#### FOR USE IN A FUTURE OF SCARCITY.

## DEEURURING



## PRACTICES OF DESIGN, TECHNOLOGY, RESEARCH AND INDUSTRY THAT DEPRIVE US

### **OF CERTAIN FUTURES, INCLUDING DESTROYING**

### THE POSSIBILITY OF A HABITABLE FUTURE.



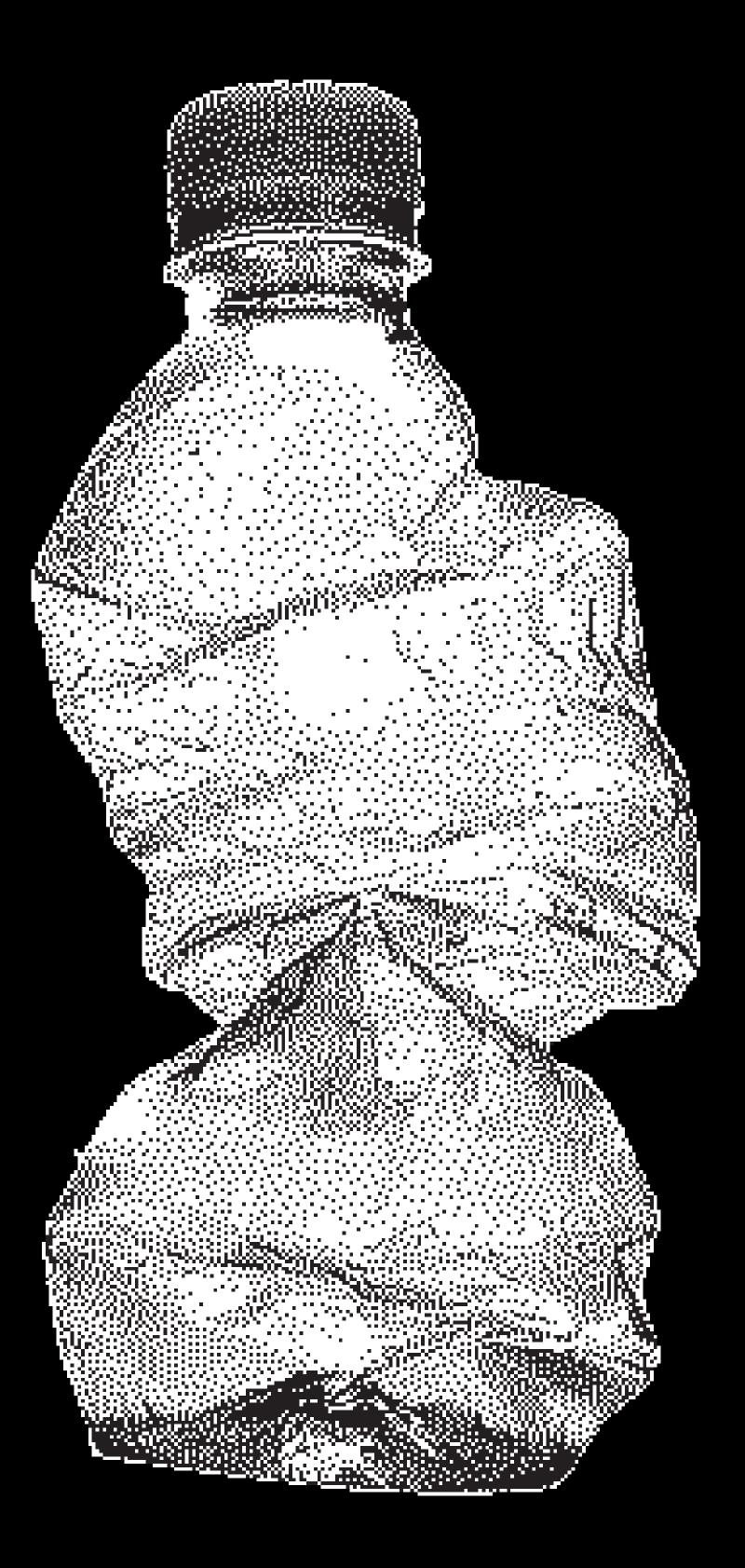


OPTIMISING OR IMPROVING THE ENERGY EFFICIENCY OF A COMMODITY

#### **ALSO TENDS TO INCREASE ITS OVERALL**

#### **RATE OF CONSUMPTION.**

# NEGATECHNOLOGY



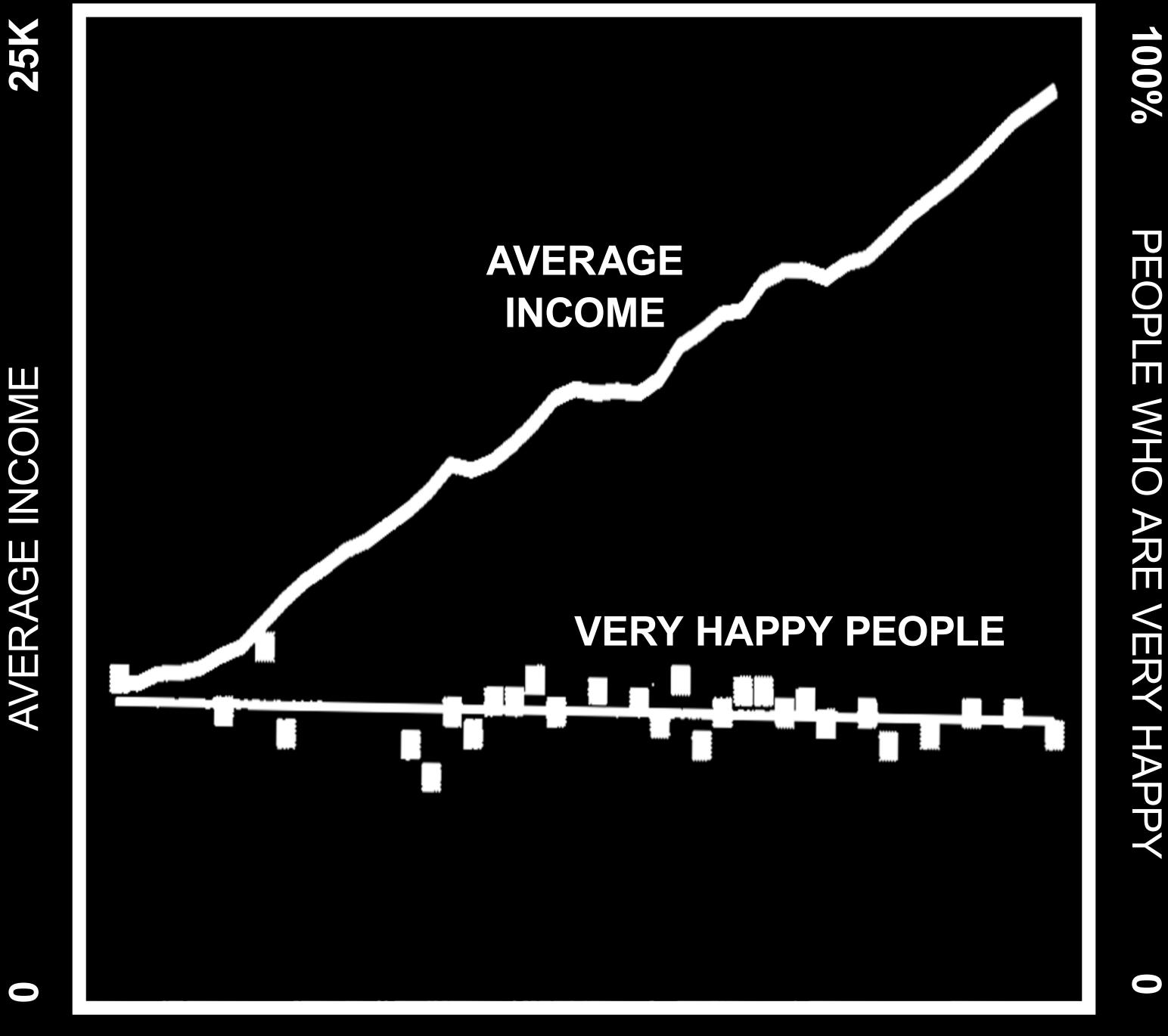
## THERE ARE MANY SITUATIONS, WHERE LESS

### TECHNOLOGY AND COMPLEXITY, NOT MORE,

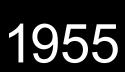
### MAY BE DESIRABLE FOR A SYSTEM.

# PROSPERITY WITHOUT GROWTH

**AVERAGE INCOME & HAPPINESS, USA** 



## PROSPERITY TRANSCENDS MATERIAL CONCERNS. BEYOND A CERTAIN THRESHOLD,



2007

#### **GROWTH NO LONGER CORRELATES WITH**

#### **AN INCREASE IN WELL-BEING.**

## ECOSYSTEM SERVICES

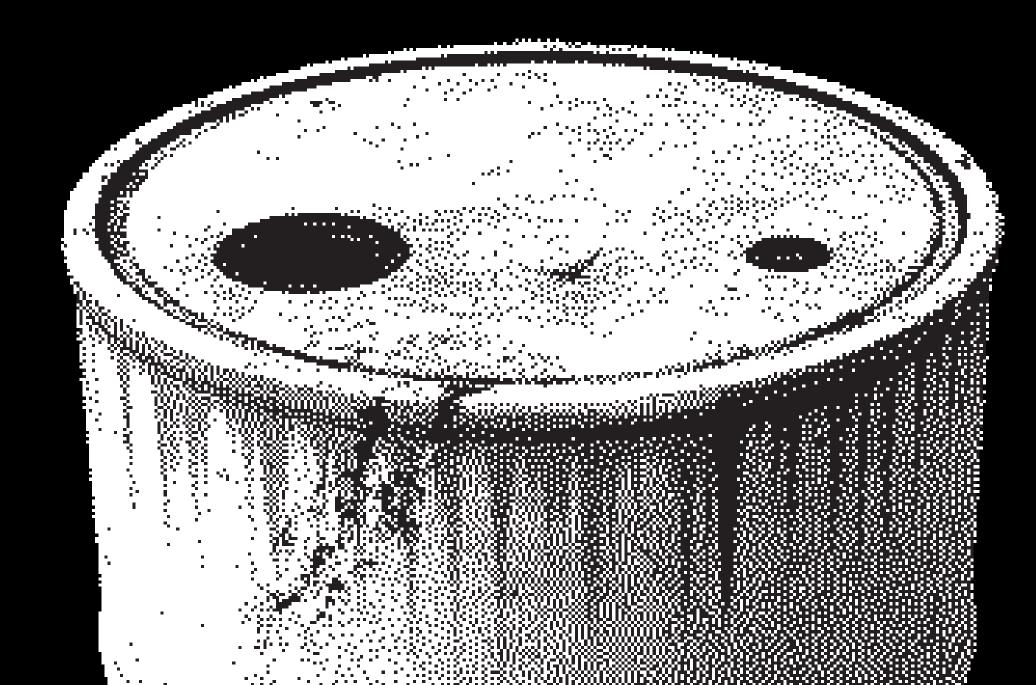


## ECOSYSTEMS PROVIDE MANY SO-CALLED ECOSYSTEM SERVICES. SOME ARE ESSENTIAL

## FOR LIFE (SUCH AS POLLINATION) AND

### ARE THEN CONSIDERED COMMON GOODS.

# NEGATIVE COMMONS



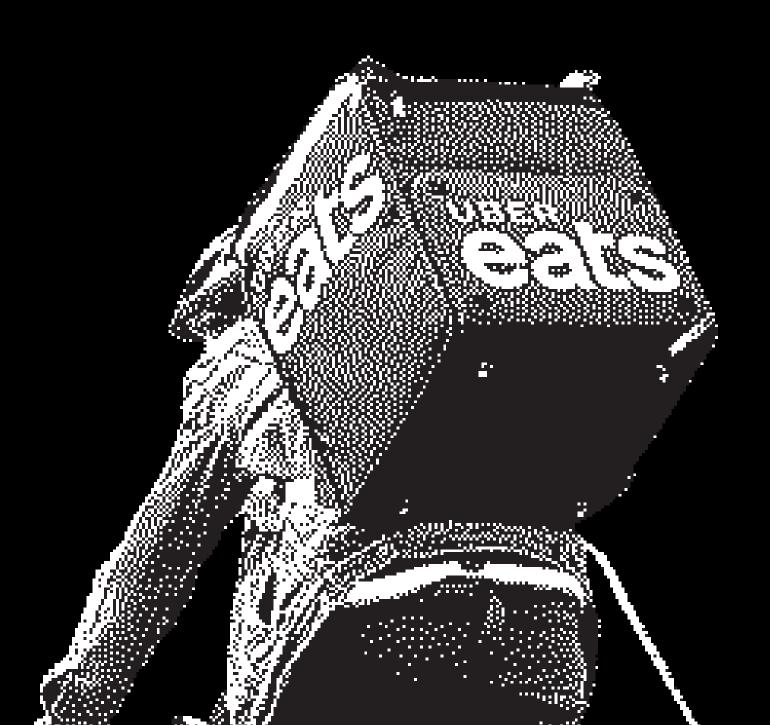
## A SET OF «NEGATIVE» ASSETS WE COLLECTIVELY INHERIT THAT NEED TO BE TAKEN CARE OF, BUT ALSO POTENTIALLY



### **PREVENTED FROM BEING PRODUCED**

### IN THE FIRST PLACE.

## CAPITALISM **F** SOCIAL PROGRESS



## IT'S NOT THANKS TO CAPITALISM BUT TO PROGRESSIVE POLITICS THAT WE ARE LIVING LONGER. IN THE ABSENCE OF



### **PROGRESSIVE FORCES, GROWTH HAS OFTEN**

### WORKED AGAINST SOCIAL PROGRESS.

## ANCIENT SUNLIGHT

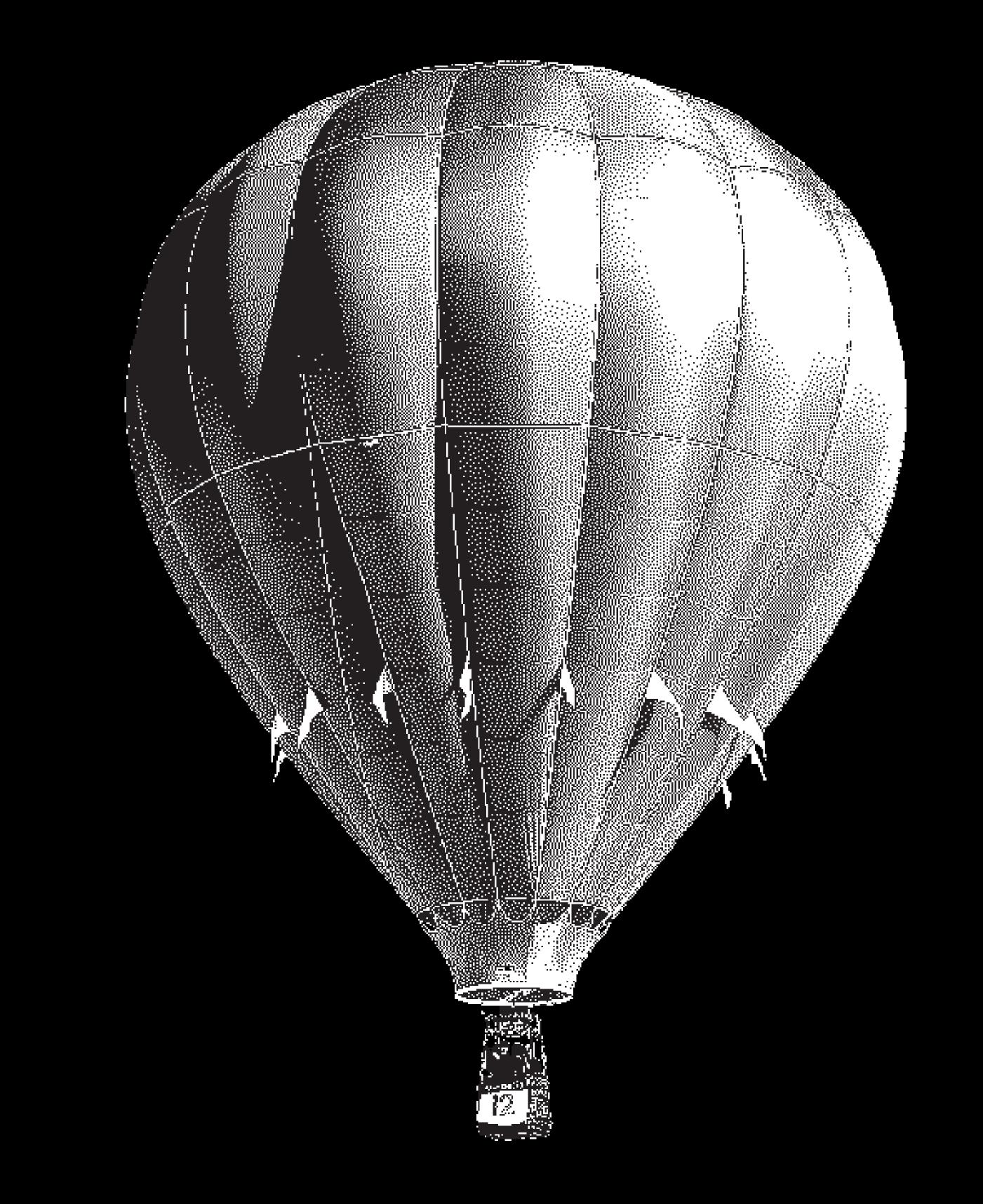


FOSSIL FUELS ARE THE END PRODUCT OF MILLIONS OF YEARS OF SUNLIGHT SHINING ON PLANTS THAT GET CONVERTED TO OIL

### AND COAL, AND GAS. WE ARE NOW UTILISING

### THE LAST HOURS OF ANCIENT SUNLIGHT.







### **TECHNOLOGIES WHEN IT COMES TO**

## DESIGNING A SUSTAINABLE SOCIETY.

## BLACK SWAN THEORY



## AN UNFORESEEABLE EVENT WHICH HAS A LOW PROBABILITY OF OCCURRING AND

### WHICH, IF IT DOES OCCUR, HAS FAR-REACHING

### AND EXCEPTIONAL CONSEQUENCES.

# GEODVERSITY



## GEODIVERSITY BEGETS BIODIVERSITY. YOU NEED TO HAVE A DIVERSE GEOLOGICAL SETTING IN ORDER TO CREATE THE SET OF



#### **NICHES THAT YOU NEED FOR VARIOUS LIFE**

### FORMS TO SPECIALISE.