How to make of the E.U Commission’s Green Deal an “Orchestral manoeuver in the light”

Jacques de Gerlache

Webinar

Club of Rome - EU Chapter

1st October 2020
The European Green Deal is the European Commission plan to make the EU's economy sustainable. This can be done by turning climate and environmental challenges into opportunities, and making the transition just and inclusive for all.

The main Policy areas involved in the *European Green Deal*

- **Biodiversity**
  Measures to protect our fragile ecosystem(s);

- **From Farm to Fork**
  Ways to ensure more sustainable food systems;

- **Sustainable agriculture**
  Sustainability in EU agriculture and rural areas thanks to the common agricultural policy (CAP);

- **Clean energy**
  Clean energy;

- **Climate action**
  Making the EU climate neutral by 2050;

- **Sustainable industry**
  Ways to ensure more sustainable, more environmentally-respectful production cycles;

- **Building and renovating**
  The need for a cleaner construction sector;

- **Sustainable mobility**
  Promoting more sustainable means of transport;

- **Eliminating pollution**
  Measures to cut pollution rapidly and efficiently.
The multiple dimensions of the implementation of a sustainable transformation of the EU economy identified by the *Green Deal*
The constraints on the present evolution of the systems managing humanity are multiple and interactive.

1. **Ecological and climate systems:**
   - Climate impact *(mitigation and adaptation)* and food and water resources management

2. **Social systems:**
   - Of social needs, behaviors, and cultures vs social organisations:
     - Pressure from physical, chemical, biological agents *(pollution, diseases...)*.
     - Life and labour conditions, etc.

3. **Economic systems:**
   - Coordination between macro and micro levels,
   - Limits of indicators *(ex: GDP)*
   - Alteration of the planetary capital and predatory practices

4. **Financial systems:**
   - No more geared to sustain economy *(speculation)*
   - Dissociating tangible and immaterial

5. **Political systems:**
   - The tensions among and between collective and individual levels and limits of models to manage these.

6. **Value systems:**
   - The lack of integration and inhomogeneous application of the diversified human cultures and values.
One key challenge: a really integrative and harmonized management of 3 main *irreducible* dimensions of *Humanity* at the *Planetary* level

*Global and operational* methods for:

- Planning & Leadership;
- Coordination & Monitoring;
- Governance & Assessment;

With the appropriate stakeholders delegations.
An example of management of irreducible and dynamic complexity: the difference between a simple *buffet* and a *gala dinner*
More "complex“ in its dynamic: a *symphonic orchestra*

From *the place* of the concert to the *repertoire*, from the *conductor* to the *musicians* through the *music scores* and their *interpretation* ...
An option: the *jazz* orchestra

- Each musician plays its part of *the same piece* but *improvisation is possible*

In this vast cultural orchestra, *everyone plays anyway in harmony with each other and the whole.*

*Adaptation* of the conductor and of the musical score to the reality is possible.

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*BATESON, BIRDWHISTELL, GOFFMAN, HALL, JACKSON, SCHEFLEN, SIGMAN, WATZLAWICK*: *La nouvelle communication*, Seuil 1984 quoted by Gérard Donnadieu *Ago-Antagonisme et Sciences humaines* *Res-Systemica*, volume 11, article 03
How to manage such complex challenges without losing *sight of the north*? Through the four Poles of a compass!

**Pole 1**
Identify the ISSUES:
*Intrinsic properties*

**Pole 2**
Evaluate the CHALLENGES (*RISKS*) related to the exposure to the issues

**Pole 3**
Decide (regulate) their level of MANAGEMENT to be taken into consideration

**Pole 4**
Integrate STAKEHOLDERS CONSTRAINTS & EXPECTATIONS between tolerable risks and expected benefits

*GreenFacts*

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One obstacle: the failure of classical means to manage processes which are intrinsically complex & irreducible.

Most of our teachings still lead us to be:

- Réductive
- Dissociative
- Logical
- Static
- Hierarchic

In a world which is:

- Non reductible
- Global
- In network(s)
- Dynamic
- Evolutive
- Chaotic

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It's time to change some of our dominant paradigms!

"It is not how things are really that is the problem and needs to be changed; but the opinion that things should be considered in a certain way "

Paul Watzlawick

René Magritte
Better operationally addressing the paradigm of complexity

How adopt the existing structured methods allowing to better integrate ...

... the frozen structure of a single building...

... into the functional and organizational nature of a dynamic and evolving urban network

... more than on the basis of “intuition” and “field experience”?
Example: the complexity of energy management: not really a new issue! 

Source: The Macroscope, Joël de Rosnay
(Re) reconciling the potentials of the two “functional hemispheres” of our brain

Too often, the systemic brain is still just considered as a purely intuitive and « emotional », deprived of any structured « logic ».

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Facing more and more complexity, an evolution of some of our paradigms is **essential** and **urgent**

- It was not by drawing on the draft horse that the horsepower was developed;
- It was not by trying to improve the performance of the candle that the electric bulb was discovered,
- or by improving its filament that the LED bulb was developed.

*True inventions are created by open states of mind, curiosity and audacity;*

*By accepting to integrate new facts and discoveries in our existing paradigms!*
One key example of paradigm adaptation delay: why(for) are trees existing...

- Because, like hurricanes, they **maximize heat dissipation** through water evaporation!

- Biological (eco)systems are **simply sophisticated forms of dissipative systems**; **this dissipative principle is universal**!

- From the hurricane to the tree, from an animal to a city, biological evolution promotes both:
  - the most stable ("resilient") forms;
  - but also the most dissipative forms, which will also be the most complex.
Why then are ecosystems evolving?

• From the cell to the tree, from an animal to a city, biological evolution promotes an equilibrium combining:
  • the most dissipative state (efficient);
  • but also, the most stable state ("resilient")

which will generate the most complex forms (animals ... and humans! ...).
A Systemic Interpretation of the European Union

GREEN DEAL

BY P. CORSI & J. DE GERLACHE

https://www.clubofrome.eu/a-systemic-interpretation-of-the
The *Root concepts* of the game changer *European Green Deal*

- **C0** - A Systemic and Global GREEN DEAL:
  - **C1** - That Activates *Eco-lo-no-mies*;
  - **C2** - That Mandates *Stakeholders*;
- **C3** - For Societies Operating in *Coherence* and *Compliance*;
- **C4** - Geared Toward Sharable *Fairness Values*. 
The objective: identify operational phases in an orchestrable and orchestrated implementation of the *Green Deal* objectives

A systemic analysis and reinterpretation of the *Green Deal* project:

1. To understand and interpret it by identifying the various dimensions and their irreducible interactions of its key areas, objectives and stakeholders involved;

2. To link the present and future situations to this global understanding and reinterpretation and deduce the key concepts and strategic axes;

3. Model and explore scenarios of action plans;

4. Suggest and act by developing a really operational and sustainable harmonized *Green Deal* action plan and its monitoring the progress of the *Green Deal*'s objectives.
A systemic reinterpretation of the *Green Deal*

This process is intended to **facilitate its harmonized implementation** by building teams of stakeholders and actors and providing them with the means to do so:

1. **Analyse and understand the project** in the multidimensional context of the current situation: *environmental*, *socio-economic* and *sanitary* of course, but also historical, political and *technological*;

2. Evaluate the main *basic concepts*, the current *dominant norms* and the issues that appear essential in this context;

3. Based on these, reformulate these elements in the form of *pivotal concepts* delimiting four *strategic axes: the compass of the Green Deal*;

4. Integrate this approach into the organisation of an *orchestrated symbiotic matrix* integrating the stakes, their constraints and the stakeholders involved;

5. Then orchestrate the scenarios of a multi-dimensional *Master Plan* defining a series of coordinated *Key Actions*;

6. Identify explicit, precise and *measurable indicators* for sustainability and monitoring of these actions;

7. Share the *policy implications* drawn from the overall proposal and **promote its implementation**.
Starting by identifying the dominant design of present societal management

A. **Ecological and climate systems**: lack of management of the **causes and consequences** of the **climate crisis** *(mitigation and adaptation to global warming)* and of **biodiversity crisis**. In particular **unsustainable food** production and **water management** *(earthly, maritime)*;

B. **Societal systems**: Demography and the **complexity** of social needs, behaviors, and cultures vs present social organizations. In particular for the:
   - **Sanitary dimension**: The **pressure** from physical, chemical **pollution and biological pandemia**;
   - **Others**: poverty, labour conditions & robotisation, migrations, religious integrism, etc ...

C. **Economic systems**: The **lack of coordination** between macro and micro levels, the dominance of simplistic indicators like the **GDP** or unemployment numbers;
   - the **unsustainable** production altering planetary capital, the **predatory** practices of excessively liberal and non regulated mercantile economy;

D. **Financial systems**: Finance is **not geared to sustain** economy *(speculation)*, the **dissociation** between tangible and immaterial finance which obeys **zero-sum** games;

E. **Political systems**: The **tensions** among and between collective and individual oriented systems;

F. **Human values systems**: The **lack of coherent integration** and management of the diversified human cultures and values. in a context of world globalisation
The first step: assembling the Green Deal root knowledge base

• Any conceptual investigation of the root knowledge necessitate to set up a base identifying the relevant and important terms and their underlying concepts;
• The start-off $K_0$ knowledge base will be composed of the conceptual clusters obtained by extracting these notions from the scanning of the Green Deal document;
• $K_0$ may possibly be later augmented by adjoining additional terms and concepts which may be deemed necessary for pursuing the exploration of the general GD problématique.
# Examples of main reference terms used in the *Green Deal*

<table>
<thead>
<tr>
<th>REFERENCE TERMS Appearing WITHIN THE GREEN DEAL DOCUMENT</th>
<th>COMMENTS AND SUGGESTIONS FOR THE CONCEPTUAL ENRICHMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Linear industry</td>
<td>Not always a positive term as it is business-as-usual - Use as reference</td>
</tr>
<tr>
<td>Compatibility</td>
<td>Is part of integration</td>
</tr>
<tr>
<td><strong>Affordable</strong></td>
<td>That is compatible with the means and conditions (of a person, entity, etc.) Property: Affordability</td>
</tr>
<tr>
<td>Allowances</td>
<td>Is an allocation (Carbon pollutant allowance) enabling credits for a specific action - Here used in the context of carbon emissions</td>
</tr>
<tr>
<td>Alternative infrastructures</td>
<td>Substitutive or complementary infrastructure that are put to use - Here mostly used in the distribution context in the transportation, freight or data domains</td>
</tr>
<tr>
<td>Changes in (consumer and business) behavior</td>
<td>The making of more sustainable, ecologically and economically compatible behavior (Behavior change in practices)</td>
</tr>
<tr>
<td><strong>Clean energy</strong></td>
<td>Respecting the allowance level</td>
</tr>
<tr>
<td>Clean products</td>
<td>What is below the ‘acceptable limit’ (tolerable limit)</td>
</tr>
<tr>
<td><strong>Climate neutrality</strong></td>
<td>Characterises a non impact on climate - Is without impact on climate equilibrium (human activity)</td>
</tr>
<tr>
<td>Compliance</td>
<td>What respects a norm - There exists only one compliance level</td>
</tr>
<tr>
<td>Compliance dashboard</td>
<td>Indicators assessing the compliance</td>
</tr>
<tr>
<td>Sustainability (debt)</td>
<td>The limit of sustainability is bankruptcy (failure, insolvency…)</td>
</tr>
<tr>
<td>Decarbonising</td>
<td>Decarbonisation leads to using non fossil fuels energies</td>
</tr>
</tbody>
</table>

*Tableau 1*
Six dimensions evidencing the need of a true systemic symbiosis of the *Green Deal* objectives reducing the risks of breaks in society’s constituents

1. **Ecological and climate systems:** climate impact (*mitigation and adaptation*) and food and water resources management

2. **Social systems:** of social needs, behaviors, and cultures vs social organisations:
   - pressure from physical, chemical, biological agents (*pollution*, diseases...).
   - Life and labour conditions, etc.

3. **Economic systems:** coordination between macro and micro levels, limits of indicators (*ex: GDP*) alteration of the planetary capital and predatory practices

4. **Financial systems:** no more geared to sustain economy (speculation) dissociating tangible and immaterial

5. **Political systems:** The tensions among and between collective and individual levels and limits of models to manage these.

6. **Value systems:** the lack of integration and inhomogeneous application of the diversified human cultures and values.
Coherently harmonizing the whole programme of the *Green Deal* objectives is essential to make possible its complete achievement.

• Present **dissociative and dominant approaches** tends to ignore and **reinforce unbalances in ecosystems** and their multiple interacting causes and cause major disruptions in living systems.

• Such dissociative approaches create and maintain shifts and bias in values that are, at best, only those of a **sub-systems**, **unavoidably carrying divisions and preeminences**.

• Only the full integration of these **irreducible components** may warrant the reaching of a system’s values and objective.
The full integration of the systemic dimension will allow a really resilient management of such complex dimensions in *econo-lo-gical systems*. 

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**Expectations**
- Products & Services
- Jobs & Values
- Well-being
- Sustainability & Resilience
- Ethics

**Cultural & Ethical dimensions**
- Knowledge
- Creativity
- Energy & Resources
- Tools & Know-how
- Costs & Impacts
- Policies, demographics
- Ecologicals

**Means & Constraints**
Regarding the *Green Deal* challenge(s), how then elaborate an integrative and sustainable strategy without losing the north?

*Intrinsic eco-lo-nomic hazards of the present*: Identify their nature

*Take into accounts constraints and opinions* of all involved stakeholders.

*Potential risks associated*: Their analytical analysis and systemic evaluation of their interactions *Ecological, sanitaires, social, économie, financial, political.*

*Adopt actions providing an acceptable level of safety* through regulatory and incitative measures, between *précaution(s) and proportion.*
The re-interpretation of the key elements of the *Green Deal* objectives

1. **Digging up its core problematique**, plotting, analyzing and reformulating the key elements;

2. **Identify six blueprint concepts** leading to four key compass projectors allowing to identify the main strategic axes;

3. **Project the blueprints** in an integrative way to open the exploration of futures-oriented implementation of harmonised action plans;

4. **Develop practical ways to define and operationally manage** (*phil*) harmonized actions plans in the musical sense of the term;

5. **Propose and structure** a first series of about 50 key concrete actions
The amplified reformulation of its core problématique and its root concepts

C03 - « A systemic and global Green Deal with its sy

1. Encompassing, involving, and harmonizing all stakeholders,

2. Aiming to seek the means and tools mandatory for ensuring welfare:
   a. At the global and sustainable « socio-eco/lo/no/mic » level:
      i. By limiting the use of natural resources to the yields of the planetary capital,
      ii. Through adoption of appropriate processes and practices (a.o. for the optimisation of the circularity of resources uses),
      iii. Taking into account the intertwined actual constraints (a.o. climate, sanitary, food, social, economical and political crises, etc.),
   b. For the balanced evolution (i.a. repairing/restoration, homeostatic preservation and innovative improvement) of:
      i. Planetary capital,
      ii. The well-being of human societies,
      iii. The underpinning economic activity,
   c. For trans-generational and symbiotic societies and planet.

2. Within a democratic governance context. »
The reformulated *blueprint Concepts* of the *Green Deal* aimed at overcome some of the present *eco-lo-no* and social constraints

**I.** Is underpinning symbiotically « socio-eco/lo/no/mic » activities

**II.** Encompasses, implicates, and harmonises all stakeholders:
- *in their roles* (a.o. complementary, substituting, contributions...),
- *in their views* (intentions, opinions and interests).

**III.** Formulates and enforcing application of fairness values. (*a.o. philosophical, justice, governance, democracy, social, political, autonomy, equity, conviviality*)

**IV.** Limited to the use of the yields from planetary capital in a balanced way. (*i.a. repairing/restoration, homeostatic preservation and innovative improvement*)

**v.** Seeks the welfare means and tools through adoption of appropriate processes and practices. (*a.o. the circularity of resources uses*)

**VI.** Ensures symbiotic trans-generational welfare for societies and planet.
6 pivotal axes are emerging from the systemic reformulation of the blueprint concepts of the Green Deal

• They appear essential for to overcome the limits of the purely dissociative problem-solving methods.
These 6 pivotal axes are then integrated into the four poles of the compass: the challenges, their hazard & risk constraints, the key stakeholders.

### 1. MAJOR CHALLENGES:

| "Civil" forces: political, including NGOs and citizens, social, philosophical, cultural, academic, etc | Political models: between direct and indirect representation, participatie and authoritarian regimes, between political, social and economic dictatorship | Public and community services: civil services, police, army, energy networks ... | Respect for resource limits and ecological balance: land, oceans, energy, climate | Human potential: Physical and mental health, security, well-being; |

### 2. KEY STAKEHOLDER GROUPS:

- **« Regulators »**: international bodies, governments and Administrations, lawyers, ...
- **Soci(et)al actors**: unions, NGOs, federations, ...
- **Citizens** in their diversities and identities
- **Economic and financial players**
- **Specialized & « expert » actors**: medical, intellectual, legal, ecological, technological

### 3. ESSENTIAL CONSTRAINTS

- Limits of present socio-economic models;
- Excessive commercialization and globalization of the economy;
- Lack of systemic and integrative visions;
- Social models: between individualist and solidary models;
- Appropriateness and representativeness of present executive management: (inter) national authorities, governments, administrations, ...;
- Lack of anticipation & preparedness to potential global crisis: health, food, climatel social, political;
- Production of essential goods & services: health, food, housing, energy, safety, mobility, education, culture;
- ...
The reformulated the four main strategic axes of the *Green Deal*

- **C1 - That Activates Econo-lo-mies**
- **C2 - That Mandates Stakeholders**
- **C3 - For Societies Operating in Coherence and Compliance**
- **C4 - Geared Towards Sharable Fairness Values**

**C1 - That Activates Econo-lo-mies**

- **« Rethinking the goals of economy beyond the simple production of material goods. »**

**C2 - That Mandates Stakeholders**

- **« Creating stakeholders assemblies mandated from the start to the symbiotic (re)conception of integrated welfare strategies; Compatible with existing and emerging sustainability socio-eco-lo-no constraints. »**

**C3 - For Societies Operating in Coherence and Compliance**

- **« Applying integrative methodological approaches to identify and create the affordable operational objectives, This with the associated required players, processes & means, their indicators, agenda and ethical follow-up. »**

**C4 - Geared Towards Sharable Fairness Values**

- **« To gather a general assembly at international level that will redefine the democratic and human rights values at the light of the present constraints; And define precise governance rules with the means to evaluate their enforcement. »**
The expansion of these four main strategic axes

**C1 - That Activates Econo-lo-mies**
- C11 - For being socially-driven
- C12 - By being ecologically-driven (i.e. bioeconomy)
- C13 - By being economy-oriented
- C14 - By complying with the sustainable economy concept

**C2 - That Mandates Stakeholders**
- C21 - Acting with their capacities
- C22 - Acting as statutory representatives/proxies
- C23 - Acting among themselves socially
- C24 - Designing common welfare futures
- C25 - Breaking out personal welfare
- C26 - Creating futures commons

**C3 - For Societies Operating in Coherence and Compliance**
- C31 - Setting conditions for sound operations
- C32 - Creating innovative means for action
- C33 - Within the limited available planetary yields

**C4 - Geared Towards Sharable Fairness Values**
- C41 - With generational processes
- C42 - With materialized processes
- C43 - With accompaniment measures
C1 AXIS - That Activates Econo-lo-mies

"Rethinking the goals of economy beyond the simple production of material goods."

- C11- Activating an economy for being socially-driven
  
a) by being welfare-oriented
    - by avoiding social degradation
      - through raising of unemployment
      - in living conditions
      - in political conditions
    - by reinforcing conviviality in the emotional dimension
      - inter-personal relationships
    - by developing a spiritual dimension

  \[\rightarrow{ACTION C0 C11 1} \cdot \text{DIRECTLY LINK UP THIS ACTION TO C4 ACTIONS}\]

b) by favoring culture
  - as a collective education for enhancing quality in society
  - as an enhanced mechanism for improving human capacities
    - covering the arc from thought processes to strategy

  \[\rightarrow{ACTION TR C11 2} \cdot \text{TO EDUCATE ABOUT THE SHARING OF QUALITATIVE VALUES AND ITS INTEREST FOR COLLECTIVE ECONOMIC ENDEAVORS}\]

c) by making advanced conceptual realizations emerge
  - through human socialization
  - via the expansion of concepts
  - via the compression of ideas
    - towards a convergence of ideas

  \[\rightarrow{ACTION DI C11 3} \cdot \text{TO FORMALIZE THE SHIFT FROM GOODS-BASED TO WELFARE ECONOMY}\]
The relevant correspondence of the *Green Deal* objectives with those of the 17 UN’s Sustainable development goals (SDGs) has to be exploited.
Identifying 4 prospective *Fields of action* for the *Green Deal*:

- Using a **symbiotic matrix approach** to integrate and **orchestrate** the issues by taking into account the **different stakeholders**
- This makes it possible to clarify the roles and responsibilities of each one so as **to harmonise** them symbiotically.
Operational implementation of the integrated strategy

The stakeholders, gathered around the matrix:

1. jointly **integrate** its three constituent dimensions;
2. Analyze their **structural, functional and temporal interactions**;
3. then **harmonize**, in the musical and philharmonic sense of the term, the points of view and the implications;
4. agree on coherent action programs integrated with their protocols, steps, monitoring indicators, follow-up and strict uniformized governance rules;
5. **coordinate** to implement them in harmony and **communicate them** in an educational dialogue with all the stakeholders concerned.
An integrative symbiotic matrix method involving all stakeholders to analyse, build & materialize stepwise, coherent & sustainable harmonized strategic plans.
### Example of symbiotic matrix: the management of energy transition(s)

<table>
<thead>
<tr>
<th>Business &amp; financial actors</th>
<th>Energy resources</th>
<th>Energy transport &amp; storage</th>
<th>Energy uses</th>
<th>Energy savings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Develop energy resources adapted to industrial needs and economically sustainable</td>
<td>Develop combined transport &amp; storage (T&amp;S) capacities adapted to economic requirements</td>
<td>Product &amp; offer the energy necessary for industrial activities</td>
<td>Promote processes and products that reduce the energy needs for their production</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Political &amp; regulatory Actors</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Impose a.o. via taxation systems choices regarding the nature of energy resources used</td>
<td>Define needs &amp; rules regarding networks management systems ensuring fair distribution of the various forms of energy</td>
<td>Propose and impose the rules to manage sustainable energy uses</td>
<td>Define clear objectives &amp; dead lines regarding the level of energy saving to be reached</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Citizens &amp; their representa-tives incl. NGOs</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Ensure the availability of sustainable energy resources adapted to local geophysical constraints</td>
<td>Favor local energy resources &amp; develop T &amp; S respecting citizen expectations and needs</td>
<td>Debate about the societal priorities &amp; choices regarding energy uses</td>
<td>Develop processes leading to significant reductions of individual energy consumption at all levels</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Soci(etal) Actors: academics, cultural, ...</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Identify and promote the most sustainable &amp; efficient renewable mix of resources adapted to each local situation</td>
<td>Take into account innovation, societal &amp; environmental factors to improve efficiency of T&amp;S</td>
<td>Make citizens and their representatives responsible of the best integrated management of their sustainable energy uses</td>
<td>Mobilise societal actors to create paradigm shifts adapted to the new energy resources</td>
<td></td>
</tr>
</tbody>
</table>

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Example of symbiotic matrix: the management of energy transition(s)
<table>
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<tr>
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<tbody>
<tr>
<td><strong>Business &amp; financial actors</strong></td>
<td>Ensure energy transport &amp; distribution network adapted to industry profiles &amp; constraints</td>
<td>Develop storage capacities adapted to economic requirements</td>
<td>Produc and offer the energy necessary for industrial activities</td>
<td>Develop energy resources adapted to industrial needs and economically sustainable</td>
</tr>
<tr>
<td><strong>Political &amp; regulatory Actors</strong></td>
<td>Define rules regarding transport networks management systems ensuring fair distribution of the various forms of energy</td>
<td>Define the needs and rules regarding the development of energy storage capacities</td>
<td>Propose and impose the rules to manage sustainable energy uses</td>
<td>Impose a.o. via taxation systems choices regarding the nature of energy resources used</td>
</tr>
<tr>
<td><strong>Citizens &amp; their NGO representatives</strong></td>
<td>Develop energy transport networks respecting citizen habitat</td>
<td>Take into account citizens expectations and needs in storage installations</td>
<td>Debate about the societal priorities &amp; choices regarding energy uses</td>
<td>Ensure the availability of sustainable energy resources adapted to local geophysical constraints</td>
</tr>
<tr>
<td><strong>Soci(et)al Actors</strong></td>
<td>Favor local energy resources to reduce the needs of their transport</td>
<td>Take into account societal &amp; environmental factors in energy storage installations</td>
<td>Make citizens and their representatives responsible of the management of their energy uses</td>
<td>Promote the development of local but sustainable energy resources</td>
</tr>
<tr>
<td><strong>Teachers, intellectuals, academics &amp; artists</strong></td>
<td>Develop new mean to optimize and reduce the needs of transport of energy</td>
<td>Develop &amp; innovate for new storage options more adapted to the future energy sources</td>
<td>Contribute to develop the best strategic options regarding sustainable uses of available energies</td>
<td>Identify the most sustainable &amp; efficient renewable mix of resources adapted to each situation</td>
</tr>
</tbody>
</table>
**WHY**
- It is necessary to involve the civil society and representation schemes in decision processes with respect to their involvement in perception, understanding, and opinions about societies stakes and challenges.

**WHAT**
- To integrate direct citizens’ contributions to the elaboration of policies and regulations, in particular in social, ecological, and subsequent economical and political matters.

**HOW**
- By formalising the structure and organisation of the bodies involving citizens’ contributions to the elaboration of policies and regulations, and the formal integration of their decisions into regulatory and legislative processes.

**WITH WHOM**
- Depending on their type of activities and responsibilities, support the most appropriated organisations and opinion leaders to promote, among established political groups, the willingness, actions plans, and means to operationally

**HINTS**
- Take advantage of the various civil initiatives that have already created such institutionalisation tendency by analysing what made their success, limits, or failures.
Mandatory to build a stronger governance into the processes!

**Political dimension**
- European level and international treaties;
- National Parliaments;
- National Governments;
- Regional authorities;
- Ministers and ministerial cabinets;
- “Local” agreements with stakeholders

**Managerial dimension**
- Ministerial Committees;
- Administrations;
- Specialised agencies;
- Consultancy agencies & offices;
- Ethical bodies

**Legal dimension**
- International and, in particular, European legislation;
- National and regional legislation;
- Specific agreements/contracts;
- Case law

**The 3 dimensions of governance**
4 systemic Green Deal axes

<table>
<thead>
<tr>
<th>GREEN DEAL OBJECTIVES</th>
<th>C1 - That Activates Economies</th>
<th>C2 - That Mandates Stakeholders</th>
<th>C3 - For Societies Operating in Coherence and Compliance</th>
<th>C4 - Directed Toward Shareable Fairness Values</th>
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<tr>
<td>COORDINATION</td>
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<td>DISSEMINATION/APPLICATION</td>
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<td>GOVERNANCE</td>
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<tr>
<td>IMPLEMENTATION</td>
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<td>MANAGEMENT</td>
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<tr>
<td>RESEARCH &amp; DEVELOPMENT</td>
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<td>REGULATIONS &amp; POLICIES</td>
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<tr>
<td>TRAINING</td>
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</table>

8 Actions types

43 operational Actions with their indicators and follow-up with appropriate governance
Priority series of symbiotic actions to make the **Green Deal** really happen

<table>
<thead>
<tr>
<th>GREEN DEAL PURPOSES</th>
<th>C1 - That Activates Economies</th>
<th>C2 - That Mandates Stakeholders</th>
<th>C3 - For Societies Operating in Coherence and Compliance</th>
<th>C4 - Geared Toward Shareable Fairness Values</th>
</tr>
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<tbody>
<tr>
<td><strong>COORDINATION</strong></td>
<td>C1/2 - TO SYNPOLY AND PROCLAIM THE VITAL DISINTEGRATION BETWEEN FINANCIAL AND REAL ECONOMY ASSETS TO INITIATE NEW ECONOMIC ENGAGEMENTS</td>
<td>NB. Actions C1/2, C1/3, C1/4 are promoted by stakeholders.</td>
<td>C2/3 - TO REDEFINE THE ECONOMIC RELATIONAL INSTITUTIONS TO ENVIRONMENTAL SMARTS</td>
<td>C4/5 - TO REDUCE THE ECONOMIC INSTITUTIONS TO ENVIRONMENTAL SMARTS AND THEIR ENFORCEMENT (Includes Actions C4/1 and C4/2)</td>
</tr>
<tr>
<td><strong>COMMUNICATION DISSEMINATION</strong></td>
<td>C1/3 - TO FORMULATE THE SHIFT FROM GOODS-BASED TO SERVICE-BASED ECONOMY</td>
<td>NB. Action C1/3 is adopted by all stakeholders.</td>
<td>C2/4 - TO INSTITUTIONALIZE THE ECONOMIC RELATIONAL INSTITUTIONS TO ENVIRONMENTAL SMARTS</td>
<td>C4/6 - TO REDUCE THE ECONOMIC INSTITUTIONS TO ENVIRONMENTAL SMARTS</td>
</tr>
<tr>
<td><strong>GOVERNANCE</strong></td>
<td>C1/5 - TO DESIGN AND IMPLEMENT CIRCULAR ECONOMY MODELS</td>
<td>C2/5 - TO DESIGN AND IMPLEMENT CIRCULAR ECONOMY MODELS</td>
<td>C2/6 - TO STRATEGIZE THE ECONOMIC RELATIONAL INSTITUTIONS TO ENVIRONMENTAL SMARTS</td>
<td>C4/7 - TO REDUCE THE ECONOMIC INSTITUTIONS TO ENVIRONMENTAL SMARTS</td>
</tr>
<tr>
<td><strong>IMPLEMENTATION</strong></td>
<td>C1/6 - TO DESIGN AND IMPLEMENT CIRCULAR ECONOMY MODELS</td>
<td>C2/7 - TO DESIGN AND IMPLEMENT CIRCULAR ECONOMY MODELS</td>
<td>C2/8 - TO STRATEGIZE THE ECONOMIC RELATIONAL INSTITUTIONS TO ENVIRONMENTAL SMARTS</td>
<td>C4/8 - TO REDUCE THE ECONOMIC INSTITUTIONS TO ENVIRONMENTAL SMARTS</td>
</tr>
<tr>
<td><strong>MANAGEMENT</strong></td>
<td>C1/7 - TO DESIGN AND IMPLEMENT CIRCULAR ECONOMY MODELS</td>
<td>C2/9 - TO DESIGN AND IMPLEMENT CIRCULAR ECONOMY MODELS</td>
<td>C2/10 - TO STRATEGIZE THE ECONOMIC RELATIONAL INSTITUTIONS TO ENVIRONMENTAL SMARTS</td>
<td>C4/9 - TO REDUCE THE ECONOMIC INSTITUTIONS TO ENVIRONMENTAL SMARTS</td>
</tr>
<tr>
<td><strong>RESEARCH &amp; DEVELOPMENT</strong></td>
<td>C1/8 - TO DESIGN AND IMPLEMENT CIRCULAR ECONOMY MODELS</td>
<td>C2/11 - TO DESIGN AND IMPLEMENT CIRCULAR ECONOMY MODELS</td>
<td>C2/12 - TO STRATEGIZE THE ECONOMIC RELATIONAL INSTITUTIONS TO ENVIRONMENTAL SMARTS</td>
<td>C4/10 - TO REDUCE THE ECONOMIC INSTITUTIONS TO ENVIRONMENTAL SMARTS</td>
</tr>
<tr>
<td><strong>REGULATIONS &amp; POLICIES</strong></td>
<td>C1/9 - TO DESIGN AND IMPLEMENT CIRCULAR ECONOMY MODELS</td>
<td>C2/13 - TO DESIGN AND IMPLEMENT CIRCULAR ECONOMY MODELS</td>
<td>C2/14 - TO STRATEGIZE THE ECONOMIC RELATIONAL INSTITUTIONS TO ENVIRONMENTAL SMARTS</td>
<td>C4/11 - TO REDUCE THE ECONOMIC INSTITUTIONS TO ENVIRONMENTAL SMARTS</td>
</tr>
<tr>
<td><strong>TRAINING</strong></td>
<td>C1/10 - TO DESIGN AND IMPLEMENT CIRCULAR ECONOMY MODELS</td>
<td>C2/15 - TO DESIGN AND IMPLEMENT CIRCULAR ECONOMY MODELS</td>
<td>C2/16 - TO STRATEGIZE THE ECONOMIC RELATIONAL INSTITUTIONS TO ENVIRONMENTAL SMARTS</td>
<td>C4/12 - TO REDUCE THE ECONOMIC INSTITUTIONS TO ENVIRONMENTAL SMARTS</td>
</tr>
</tbody>
</table>
Harmonized organisation of the actions on basis of their nature (1/2)

**CO - COORDINATION ACTIONS**

C13 2 - TO EVOLVE DEMAND TOWARDS QUALITATIVE RATHER THAN QUANTITATIVE GROWTH.
C13 3 - TO RAISE AWARENESS ON THE VIRTUAL DISCREPANCY BETWEEN FINANCE AND REAL ECONOMY AND POINT TO RESOLUTION AXES.
C13 4 - TO RESTORE MORE DIRECT LINKS BETWEEN THE ENTREPRENEUR AND THE INVESTOR.

**DI - COMMUNICATION AND DISSEMINATION ACTIONS**

C11 3 - TO FORMALIZE THE SHIFT FROM GOODS-BASED TO WELFARE ECONOMY.
C43 1 - TO DISSEMINATE THE NEW FORMULATION OF THE DEMOCRATIC AND HUMAN RIGHTS VALUES AND THEIR ENFORCEMENT. *Incl. C42 1-C42 2.*

**DI/TR ACTION**

C33 5 - TO DISSEMINATE THE ADOPTED PRACTICES, TRAIN THE RELEVANT PLAYERS TO MAKE THEM USED, AND PROVIDE FINANCIAL INCENTIVES.

**GO - GOVERNANCE ACTION**

C22 1 - TO INSTITUTIONALIZE THE STAKEHOLDERS INVOLVEMENT AND PRACTICE INTO DECISION BODIES.

**IM - IMPLEMENTATION ACTIONS**

C12 5 - TO DESIGN AND IMPLEMENT CIRCULAR ECONOMY MODELS.
C22 2 - TO FORMALIZE STAKEHOLDERS’ CONTRIBUTIONS AND PRACTICES FOR INTEGRATION INTO DECISION-MAKING PROCESSES.
C23 1 - TO STRUCTURE THE STAKEHOLDERS’ COMPETENCIES, EXPERIENCE AND CONTRIBUTIONS TO DECISION-MAKING PROCESSES.
C23 2 - TO STRUCTURE AND DEVELOP GUIDELINES FOR STAKEHOLDERS’ OPERATIONAL MANAGEMENT IN DECISION-MAKING PROCESSES.
C33 1 - TO QUANTIFY THE AVAILABLE YIELDS FROM THE PLANETARY CAPITAL EXPRESSED WITH ADAPTED INDICATORS.
Harmonized organisation of the actions on basis of their nature (2/2)

RD - RESEARCH & DEVELOPMENT ACTIONS

C12 1 - TO DEFINE THE LIMITS OF RENEWABLE REVENUES.
C12 2 - TO STUDY THE VARIOUS WAYS OF ECODESIGN OPTIMIZATION.
C24 1 - TO DESIGN COMMON WELFARE FUTURES.
C25 1 - TO RESEARCH FUTURE MODELS FOR EXTENDING PERSONAL WELFARE BY BREAKING CONVENTIONAL MENTAL PARADIGMS.
C26 1 - TO RESEARCH FUTURES COMMONS AND FORMALLY INTEGRATE THEM INTO CURRENT PRACTICES.
C33 2 - TO RESEARCH THE WAYS TO OPTIMIZE THE USE OF AVAILABLE YIELDS WITHIN THEIR LIMITS.
C41 1 - TO TAKE STOCK OF AND REPORT ON THE PRESENT EXPRESSION OF DEMOCRATIC AND HUMAN RIGHTS VALUES AS SHARED ACROSS THE WORLD TODAY.

RP - REGULATION AND POLICY ACTIONS

C14 1 - TO PURSUE THE FOLLOW-UP OF INTERNATIONAL REGULATIONS & AGREEMENTS REGARDING CLIMATE.
C14 2 - TO PURSUE FOLLOW-UP REGULATIONS LIMITING OR ELIMINATING ATMOSPHERIC POLLUTANTS.
C14 3 - FIGHTING AND PREVENTING POLLUTION IN SURFACE AND GROUNDWATERS.
C14 4 - OCEANS POLLUTION: CONTROLLING CHEMICAL, HUMAN WASTE.
C14 5 - OCEANS POLLUTION: CONTROLLING IN PARTICULAR THE REMOVAL AND GENERATION OF PLASTICS WASTE.
C14 6 - CONTROLLING OVERFISHING IN OCEANS.
C14 9 - TO PURSUE THE REGULATION OF PHYTOSANITARY (PESTICIDES, NUTRIENTS, ETC.) PRODUCTS AND OTHER POLLUTANTS USES.
C14 11 - TO PURSUE THE PREVENTION OF UNDERGROUND SOIL POLLUTION (FUEL, ETC.).
C14 12 - TO CONTROL MINERAL RESOURCES EXPLOITATION (EXTRACTION AND USES) VIA REGULATIONS AND POLICIES.
C33 4 - TO ADOPT STRICT REGULATIONS ABROGATING ECONOMICAL, FINANCIAL, AND ECOLOGICAL PREDATORY PRACTICES.

TR - TRAINING ACTIONS

C11 2 - TO EDUCATE ABOUT THE SHARING OF QUALITATIVE VALUES AND ITS INTEREST FOR COLLECTIVE ECONOMIC ENDEAVORS.
C12 4 - TO EDUCATE ABOUT CIRCULAR ECONOMY PROCESSES.
C31 1 - TO DEVELOP RELEVANT CAPACITIES AND A RELEVANT KNOWLEDGE FOR ENACTING FIELD PLAYERS.
C31 2 - TO DEVELOP OPERATIONALLY RELEVANT INTEGRATED TRANSITION PLANS PUTTING IN PRACTICE THE REVISED STRATEGY OF SUSTAINABLE WELFARE DEVELOPMENT.
Analytical examination of a specific action by stakeholders

<table>
<thead>
<tr>
<th>ACTION RD</th>
<th>C25 1 - TO RESEARCH FUTURE MODELS FOR EXTENDING PERSONAL WELFARE BY BREAKING CONVENTIONAL MENTAL PARADIGMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>WHY</td>
<td>The integration of a direct civil society representation in decision processes regarding societies stakes and challenges requires the set up of formal and adapted procedures.</td>
</tr>
</tbody>
</table>
| WHAT      | To necessarily break out traditional personal welfare in relation with: 
- Ethos (incl. ethics): lifestyles, postures (language, mental attitude, disposition) and behaviour; 
- Pathos: feelings, beliefs, persuasion by means of philosophico-cultural diversity in the ways of thinking and of opinions. |
| HOW       | Through integrating (straight-thinking) emerging reasonable evidence in relation with: 
- Logos (reasoning evidence); 
- Scientifically established facts and visions; 
- Core ethical principles relative to individuals in a society itself integrated in a planetary system; 
- Futures and alternatives, possible, affordable, and sustainable reality models. |
| WITH WHOM  | All representative organizations (academic, ethical, ecological, social, economical, political, societal, etc.) have to be involved in this fundamental evolution of the way of thinking towards making a sustainable and affordable future for humanity possible within the planetary limits. |
| HINTS     | There often remains an issue for many individuals and groups when breaking up mental paradigms despite the evidence of their limits, etc. |
The potential role of the *circular economy* and differential taxation in the *Green Deal*

- Many 'externalities' *(such as environmental damage caused by extraction but also by transport or resource use)* are **not reflected in relative market prices**;
- there is still no system or willingness to integrate the cost of these externalities into prices or regulatory practices in tax regimes;
- On the basis of such accounting and the more specific indicators mentioned, it becomes possible, but also **of crucial importance**, to rethink taxation and prices in order to maintain balanced competitiveness;
- Unfortunately, the efforts required through such policies are seen, not as an essential adjustment to an inherently flawed and unsustainable economic model, but as **a burden on society**.
One key objective of the European Green Deal: a European Climate Law

- The EU aims to be climate neutral in 2050. It is proposed to turn this political commitment into a legal obligation.
- Reaching this target will require action by all sectors of the economy, including:
  - investing in **environmentally-friendly technologies**
  - supporting **industry to innovate**
  - rolling out cleaner, cheaper and healthier **forms of private and public transport**
  - **decarbonising the energy sector**
  - ensuring **buildings are more energy efficient**
  - **working with international partners** to improve global environmental standards

A key challenge of the *Green Deal: managing the climate crisis*

A warming of 2°C, is it serious, doctor??

Can you imagine your child living permanently with a fever of 39°C?
The energy transitionS: their systemic integration in the management of their 7 components

1. Exploitation of energy (re)sources
2. Energies transformations
3. Storages
4. Transport
5. Energy uses
6. Recycling & end of life
7. Non - uses

One option to facilitate the Green Deal transitions: adopt transitory differential taxation systems

- For example, by adapting the Value Added Tax (VAT) system in the EU to include the cost of externalities;
- This would make it possible to differentiate products and/or activities that demonstrate a lower impact and facilitate the development of a win-win circular economy for the environment, consumers, governments and economic activities.
- For example, goods produced from secondary materials - where VAT has already been paid once - should be exempt,
- This would encourage the use of secondary materials and help correct a situation where it is often cheaper to use virgin materials than recycled ones. (as suggested by a Club of Rome report)
Differential taxation to compensate the transitory loss of competitiveness of products that integrate environmental & social impacts

- A “Circular VAT“ is one of the compensatory economic tools, but it is not the only one envisaged;
- Its principle is simple: to temporarily attribute a reduced VAT rate to products or services with lower externalities than the market's reference offer;
- It would be applicable in the context of the EU's revision of Annex III of the European VAT Directive, which would allow it to be generalised and made permanent.
- Developed by the Fondation 2019, which proposes ways of modifying the regulatory and tax systems, both at national and international level and at the level of local authorities.

The E.U. *Green Deal* in Belgium: The *Sophia Plan*

- Proposed by the Resilience Management Group and the *Kaya coalition*
- Composed of more than 100 scientists, 182 companies and ecological transition entrepreneurs within the KAYA Coalition;
- They worked collaboratively to propose the 'Sophia' transition plan for our country;
- It includes a series of measures to help the authorities achieve this.

http://www.coalitionkaya.be/
The general principles of the Sophia Plan

• **Support for companies** that accelerate the evolution towards a regenerative economy;
• Respect for a **social floor** and an **environmental ceiling** ("doughnut economy");
• **Favouring intra-European exchanges** for food, energy, infrastructures...
• Putting **trade (including international trade)** **at the service of sustainable development**;
• **More participatory democracy**, including in business;
• Employment Pact and **reduction of social and gender inequalities**.
The present challenge: adopt a method to really integrate and harmonize the measures of the 15 themes of the *Sophia Plan*

1. Business support
2. Sustainable consumption
3. Responsible production / relocation
4. Agriculture and food
5. Banking, insurance and investment funds
6. Taxation
7. Energy
8. Buildings and land use planning
9. Mobility
10. Democracy, State and Public Authorities
11. Health
12. Social security / new social contract / employment
13. Teaching / education
14. Development cooperation
15. Inner transition

Source: [www.groupeone.be/plansophia](http://www.groupeone.be/plansophia)
A specific challenge: citizen acceptance of transition projects in general

• **This phenomenon is not new**, especially for projects of an industrial nature;

• **Citizens increasingly want to be involved in political and administrative decisions** using all means available, and sometimes to question decisions after they have been taken and implemented.

• Their potential for mobilisation and their willingness to protest is catalysed by a series of conferences and new means of communication;

• This generates a **power of influence that can overturn even large-scale projects** legitimised by the rule of law and block entire processes in the long term;

• The role of the young generation(s) could be decisive in the areas ...
Between messages from experts and public's expectations: an unavoidable gap!

<table>
<thead>
<tr>
<th>Expectations of the public</th>
<th>Legitimate answers of experts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Confidence ?</td>
<td>“Trust us!”</td>
</tr>
<tr>
<td>A Protection ?</td>
<td>there is a “tolerable” risk !</td>
</tr>
<tr>
<td>A certainty ?</td>
<td>statistical uncertainties !</td>
</tr>
<tr>
<td>Identification ?</td>
<td>Justification !</td>
</tr>
<tr>
<td>An emotion ?</td>
<td>Rational arguments !</td>
</tr>
<tr>
<td>A “raison d’être” ?</td>
<td>Competitiveness !</td>
</tr>
<tr>
<td>Education ?</td>
<td>Information !</td>
</tr>
<tr>
<td>Nature ?</td>
<td>Technique is unavoidable !</td>
</tr>
<tr>
<td>A personal free choice ?</td>
<td>The “collective” interest !</td>
</tr>
<tr>
<td>“NIMBY”</td>
<td>The materiality of the presence!</td>
</tr>
</tbody>
</table>

NIMBY !

“Done deal”, “Fait accompli” !
Convince (also yourself!) : on the basis of facts, not just of (fake?) “news” and opinions!

- **GreenFacts** is a scientific information platform covering the themes "Health - Environment - Sustainable Development" in a broad way, at a global level. [https://www.greenfacts.org/fr/index.htm](https://www.greenfacts.org/fr/index.htm)

- The aim is to **make the contents of the scientific reference reports available to non-specialist stakeholders** by summarising them;

- Its means :
  
  1) **Factual and verified summaries of scientific summary reports issued by reference entities**: administrations, international organisations;
  
  2) **Multilingual** and written in several in a language accessible to non-specialists, without any opinion or comment on them.

- **GreenFacts** also offers short pedagogical videos on certain topics:
  
  - Presentations of IPCC reports, on vaccinations, .... ;
  
  - Videos : ex : Danger - Risk & Safety (>565,000 views plus 14,500 for the French version !)
The essentials of the "Green Deal" of the European Commission

The European Union has published, at the end of 2019, a European Green Deal, which covers policy guidance on climate and pollution. These are the essential proposals: More...

This is a faithful summary of the leading report produced in 2019 by European Commission (EC): "The European Green Deal"

Latest update: 7 January 2020

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Energy
Rising fuel prices and concerns about climate change and oil dependence have brought energy to the forefront of public debates and policies. What is the future of energy production? More...

Air Pollution
Current levels of air pollution still affect public health. Air pollution can cause respiratory diseases and reduce life expectancy. More...

Biodiversity
What is the current state of biodiversity and the consequences of its loss for ecosystems and humans? More...

Chemical substances
Substances we take in through food and water or through the air we breathe may influence our health. More...

Climate change
What is the state of scientific research and knowledge on climate change? More...

Consumer safety
Some consumer products may entail risks. For example are all tooth filling materials equally safe? Can using an MP3 player threaten my hearing? More...

Disease prevention
Several diseases, such as AIDS, obesity, cardiovascular disease, and cancer are on the rise. How can they be prevented or their progress slowed down? More...

---

Food & Lifestyle
Our eating habits or our consumption of alcohol, tobacco, and other drugs can each have consequences for our health. More...

Phthalates
Phthalates are additives that are widely used in plastics and other materials, primarily to make them soft and flexible. They are used in industry as well as in medical and consumer products. There is public concern about phthalates because of their widespread use and occurrence in the environment. What is known about possible effects on environment and health? More...

Possible effects of five of the most widely used phthalates (DEHP, DBP, DNP, DIDP, and BBP) have been reviewed by the European Chemicals Bureau (ECB). More...

Radiation & electromagnetic fields
Radioactive materials, ultraviolet radiation, electromagnetic fields from mobile phones, power-lines, and other devices, the whole spectrum is covered. More...

Risks of new technologies
New technologies are entering our shopping carts. How do they differ from traditional products? Do they pose potential risk to our health or to the environment? More...

State of the environment
What is the current state of our ecosystems, forests and drylands? How is our environment affected by human activities? More...

Sustainable development
Sustainability is the capacity to meet our needs without compromising the ability of future generations to meet theirs. How sustainable are current practices? More...
In conclusion ...

• The **implementation of such an integrative symbiotic methodology** certainly seems complicated, even disheartening at first sight;

• However, **it is indispensable** for the success of energy transitions within the timeframe imposed by the urgent risks of climate change;

• There are so many examples from the failure of poor integrated application of approved agreements and policies:
  • 25 years after Kyoto, we are at the COP ... 25 or !!!!;
  • or also the somehow cacophonous management of the Covid-19 crisis ...

• But there are also examples of success:
  • Substances that destroyed the ozone layer;
  • Acid rain;
  • Dioxin emissions ;
  • water quality and chemical pollution of the North Sea (*organochlorines and heavy metals*),
  • ...

...
How to succeed??

« Associate with the pessimism of the intelligence, the optimism of the will!"

(Romain Rolland, taken up among others by Antonio Gramsci)


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In order to do this, it is first of all important to get around the pitfall of **mental inertia** ...

""There's treasure in the house next door!"

"?? But there is no house next door!!!"

"So let's build one!!!!"

Jacques de Gerlache