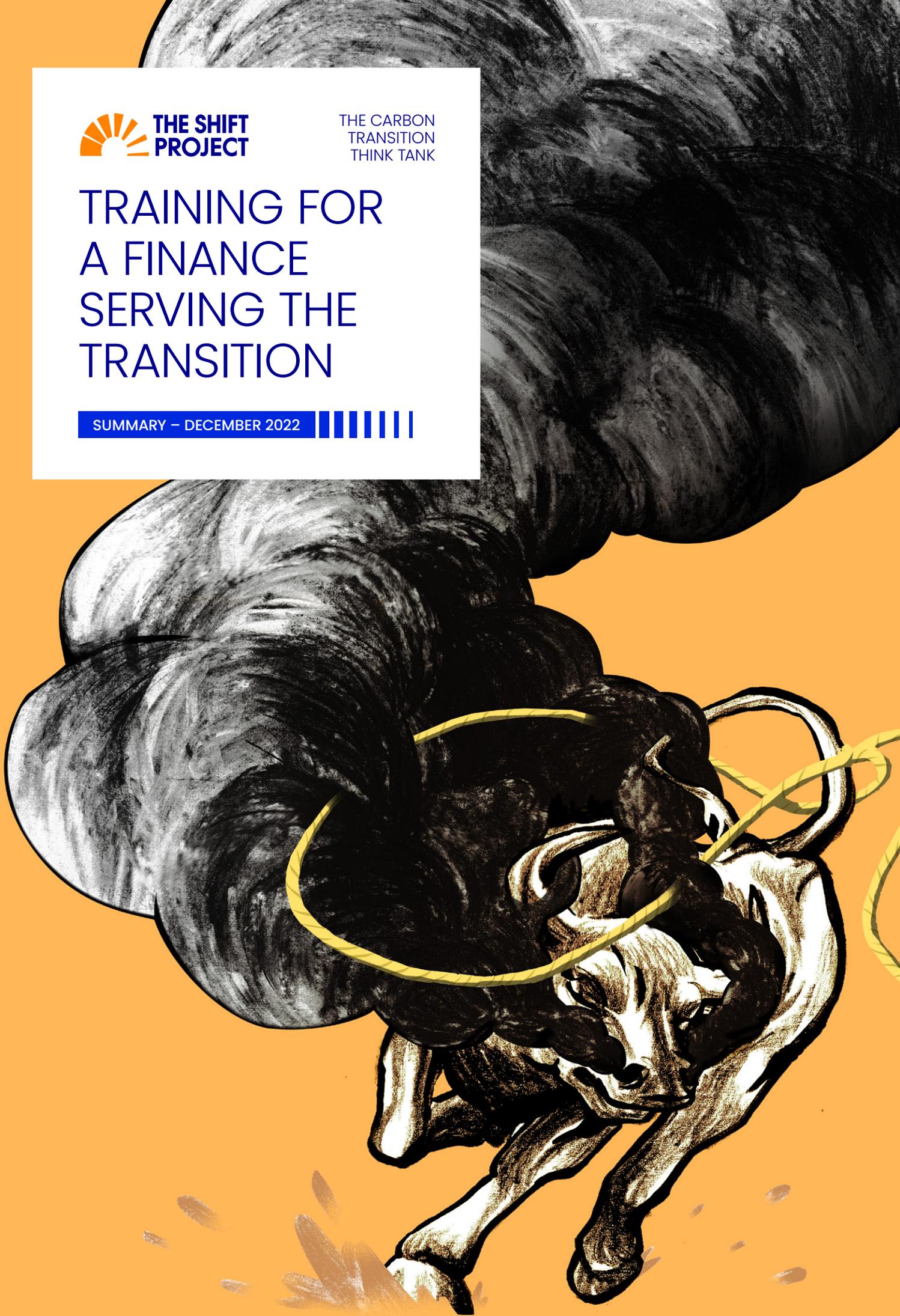




THE CARBON
TRANSITION
THINK TANK

TRAINING FOR A FINANCE SERVING THE TRANSITION

SUMMARY – DECEMBER 2022



EDUCATING ALL FINANCIAL ACTORS ON ECOLOGICAL ISSUES

AN ESSENTIAL CONDITION FOR FINANCE TO SERVE THE ECOLOGICAL TRANSITION

The Shift Project offers concrete solutions to integrate ecological issues to financial education, in partnership with professors and sector experts.

The ecological transition requires massive financing. Regarding mitigation of climate change only, investments required in France amount to 100 billion euros per year by 2030.

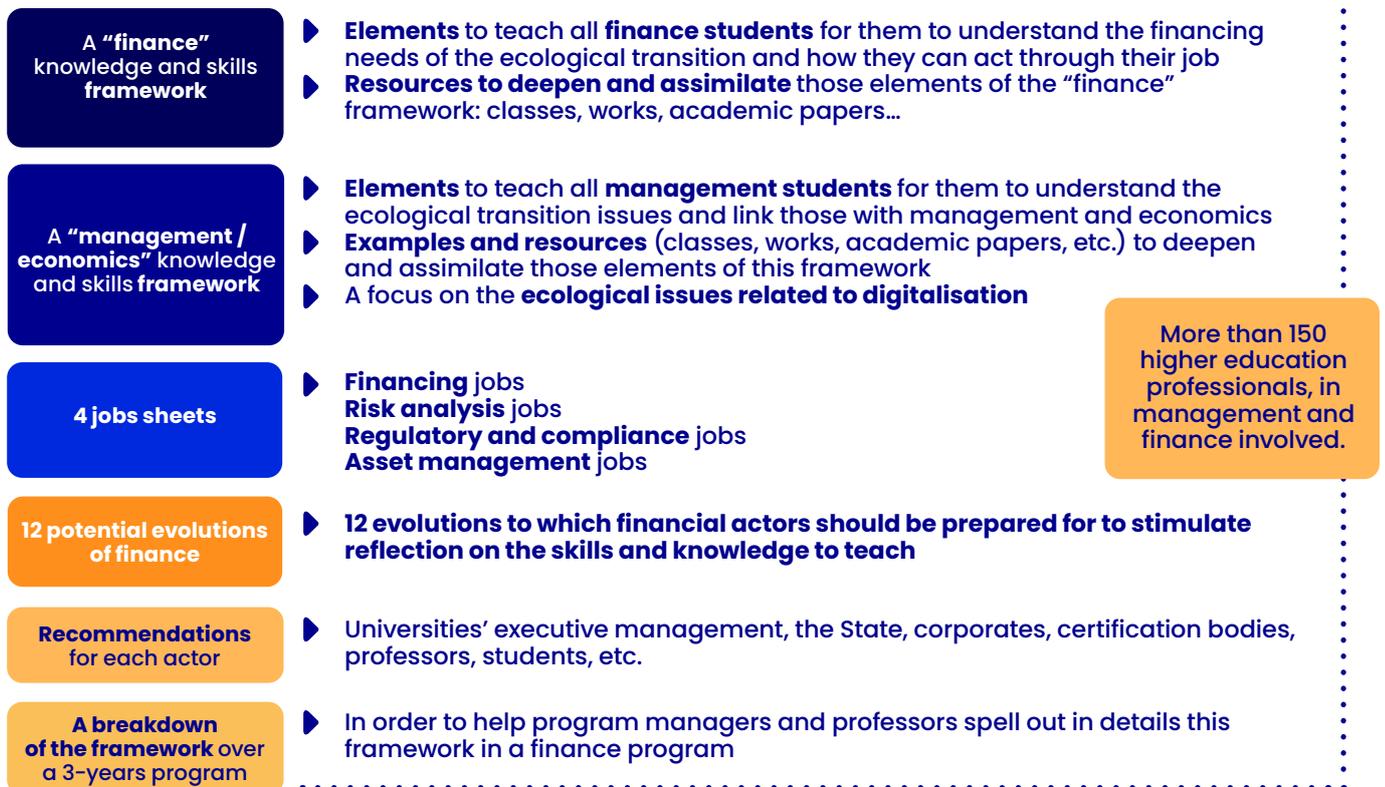
Financial needs are diverse : industrial processes decarbonization, building insulation, species protection, etc.

Only 5 % of France's financial trainings include ecological issues: financial actors have a major role to play, but they are not being trained for it.

Financial professionals must understand the physical constraints and their implications for their job. To get there, they need to follow at least 320 hours of trainings for a 5 year post-graduate program.

Ecological issues must be integrated in a transverse manner to all courses. Events to raise awareness or a single course on those issues are not enough. All actors, initial and continuous education alike, must be involved in this evolution.

IN THIS REPORT



More than 150 higher education professionals, in management and finance involved.

This report is a follow up of the "ClimatSup Business - Training tomorrow's economic actors" (November 2022), which offers recommendations for management students.

¹ ADEME - CGDD, February 2022

² 1 400 training curriculum in France analysed by The Shift Project for this report

WHAT DO FINANCE GRADUATES NEED TO KNOW TO BECOME ACTORS OF THE TRANSITION ?

The **skills and knowledge framework** is a tool for professors and education manager. It **outlines the knowledge and skills to include in core management and finance courses**.

It is supplemented with a **“finance” skills and knowledge framework**, which lays out the skills and knowledge to teach finance students in addition to (and not instead of) the core courses.

Knowledge from the management framework amount to about **165 hours of teaching, including 48 hours (6 ECTS credits) dedicated to the planetary boundaries and their socio-economic implications**. In addition, knowledge from the “finance” framework consist in 156 hours of teaching for a 5 year post-graduate program. Beyond these classes, the whole students’ academic pathway must contribute to the teaching of these skills and knowledge.



Economic actors must :

- ▶ **Understand the physical constraints and their implications** for society, economic systems and organisations.
- ▶ **Mobilise natural sciences, engineering sciences, humanities and social sciences.**
- ▶ **Know the limits of the models** taught in management and economics to take into account the ecological issues
- ▶ **Understand scenarios to get to global carbon neutrality, the impacts and dependencies on biodiversity, the critical nature of resources and their implications** for each sector of the economy.
- ▶ **Plan the transformation of economic activities to be consistent with a minimum 6% decrease in greenhouse gas emission per annum.**
- ▶ **Know how to train their management and their teams** in a transformation project towards planetary boundaries respect
- ▶ **Dare to be creative** to reinvent current practices



Financial actors must also develop their job-specific skills and knowledge, such as :

- ▶ **Know the limits of the mechanisms used in finance to take ecological issues into account** (green finance, ESG etc.).
- ▶ **Understand finance’s necessary contribution to the ecological transition** : financing the mitigation of organisations’ impacts on the environment, improve the real economy’s resilience in the face of crises to come, not worsening the ecosystemic disequilibrium.
- ▶ **Understand the ways in which ecological issues are taken into account by regulatory authorities and monetary institutions** : monetary policies for climate objectives, consideration of ecological issues by regulatory authorities, etc.
- ▶ **Know the regulatory framework guiding finance in the context of the transition**, their limitations and the tendencies in place.
- ▶ **Aim for impact in the ecological transition** : ask and redefine the relevance of financial metrics, know where to find and how to use extra-financial data, judge their quality and their limitations.



This “finance” knowledge and skills framework is complemented with detailed job sheets for each type of jobs :

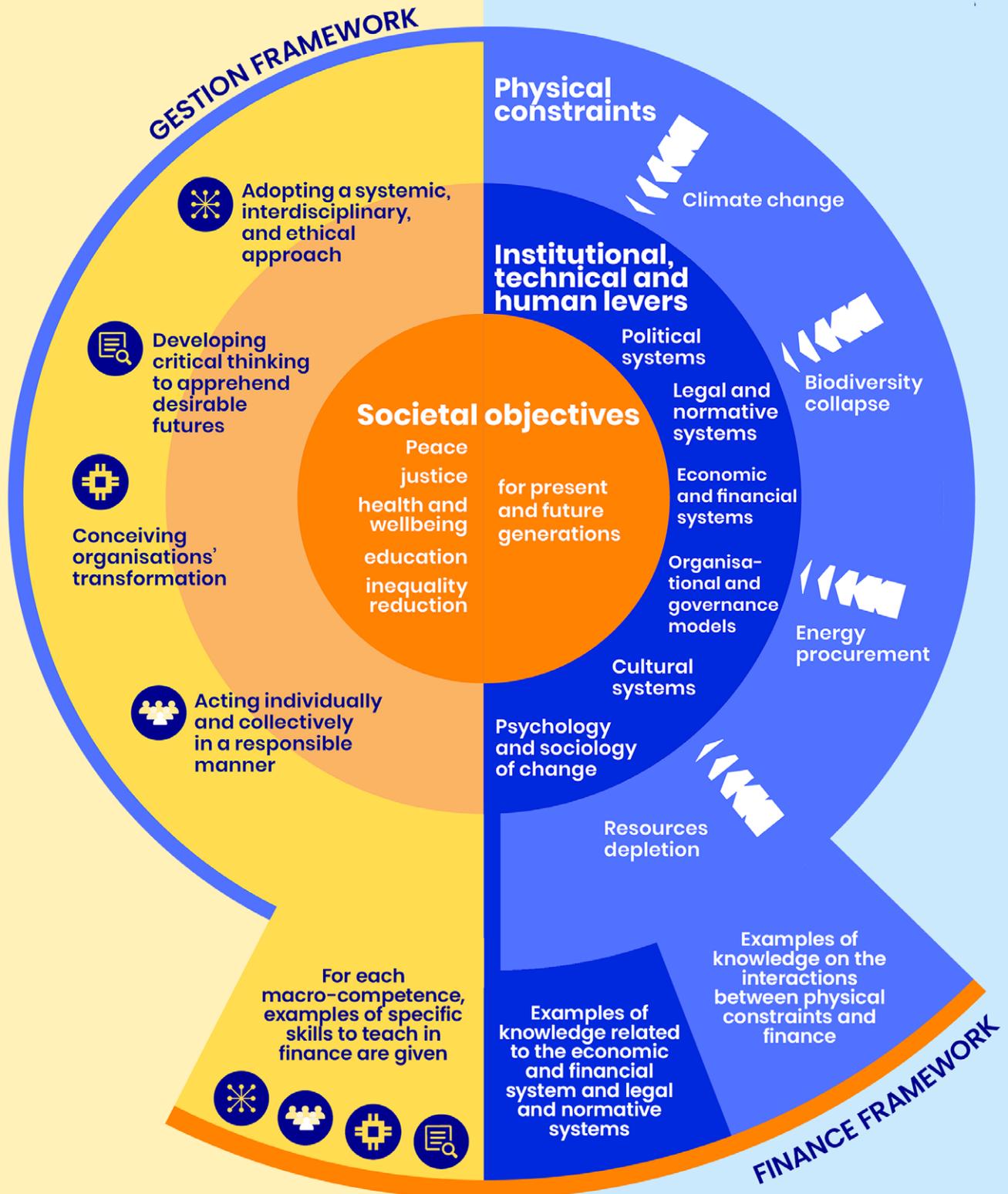
- **Project and activity financing**
- **Regulation and compliance**
- **Risk analysis**
- **Asset management**

Those job sheets describe the role of each of those jobs in the ecological transition and offer a detailed account of the knowledge and skills to teach students that wish to follow those career paths

"MANAGEMENT" KNOWLEDGE AND SKILLS FRAMEWORK...

SKILLS FOR THE TRANSITION

KNOWLEDGE RELATED TO ECOLOGICAL ISSUES



COMPLETED WITH SPECIFIC KNOWLEDGE AND SKILLS FOR FINANCE STUDENTS

FINANCIAL PROFESSIONALS MUST BE PREPARED TO AN UNCERTAIN FUTURE

Anticipating the many potential changes in finance under the effect of the crises caused by the ecological emergency is an essential step in preparing for them.

In a prospective manner, this report reviews 12 potential evolutions of finance under the effect of the ecological emergency.

Inspired by literature and contributions from sector experts, these 12 evolutions describe chosen or incurred events that could happen

and lead to significant changes in the way finance works.

This prospective reflection aims to help program directors and professors to identify the skills and knowledge professionals need to develop for them to be able to tackle the challenges they may be facing in the future.

..... A change in some economic-financial practices ?

1 The use of public investment and public guarantee to finance the ecological transition either by coordinating central banks' and public investment banks' actions, or by monetizing public debt, or by canceling a part of public debt.

2 An evolution of central banks' mission in favour of financing the ecological transition, for example, by integrating dual materiality to their doctrine (revising the collateral policy, reorienting quantitative easing, changing macro and micro-prudential policies...).

3 Injection of free currency in the economy, via buy-back of bank bonds by the central bank without asking for reimbursement.

4 Stop focusing on GDP growth objectives and the changes in practices due to repeated recession risks.

5 An evolution of exchange and inflation regimes due to an ever more volatile world with physical flows slowing-down and deglobalizing

12 evolutions to consider



A reinforced regulation

6 Development of a "brown" taxonomy, with European norms forbidding investments in sectors considered detrimental to the environment.

7 Evolution of the prudential Bâle III regulation to introduce quantitative and qualitative constraints on portfolios and banks' capital to limit climate or biodiversity risks.

8 Set up a management policy for carbon stranded assets to redirect financial flows toward sustainable activities.

9 Generalization of methods accounting for socio-ecological impacts, such as triple capital accounting (financial, human, environmental).

10 Accounting for ecological issues in fiduciary duty, conditioning executives' salaries and dividends to the ecological impact of the company

11 Integrating ecological risk at the heart of banks' and insurances' practices to best hedge against physical risks and overcome non-insurable pockets.

12 Orienting individuals' savings towards financing the transition.

RECOMMENDATIONS BY ACTOR

For each recommendation, you will find precisions in the report, as well as examples and resources.



MANAGEMENT AND PRESIDENTS

Driving the institution's approach



- ▶ **Train all staff members:**
 - 20h for management and administrative staff
 - At least 48h for professors, in order for them to understand the planetary boundaries and their implications on management teaching
- ▶ **Redefine the university's strategy** to include the ecological issues with ambition and coherence in teaching, research, campus, practices, and governance
- ▶ **Mobilise human and financial resources** to lead the transformation: **3 % of the operating budget for at least 3 years**
- ▶ Make sure that professors do not face **conflicts of interest between their courses and their professional activity**. If there are some, those conflicts of interest should be publicly disclosed.
- ▶ **Define the starting point** of the university and identify the assets it can rely on (professors, partners, etc.)
- ▶ **Organise a consultation** with all stakeholders of the institution to define a **common base of knowledge and skills**
- ▶ **Drive the integration of this common base in all programs** in a coherent manner
- ▶ **Collaborate** with other universities to move forward at a faster pace

PROFESSORS

Se former pour former



- ▶ **To train oneself** : 48h on planetary boundaries and their consequences on the course taught
- ▶ **Change course** content on the basis of skills and knowledge framework
- ▶ **Publicly share the courses** and teaching materials to accelerate the teachings' evolution
- ▶ **Report the expectations** from students and professors to the university administration
- ▶ **Switch from a posture of knowledge to a posture of facilitator**, making students actors of their learnings
- ▶ **Integrate those issues into their research program**
- ▶ **Expose potential conflicts of interest** in research and teaching

STUDENTS & ALUMNI

Engage and testify



- ▶ **Learn about ecological issues**
- ▶ **Mobilise and raise awareness** among peers and students and alumni associations, for example, by organising events
- ▶ **Alert, and relay expectations** to professors or university administration, for example by talking with them or writing open letters
- ▶ **Testify and manifest the need for skills** in the professional world (for alumni)

THE STATE

Set up a suitable framework



- ▶ Provide clear and consistent orientations on ecological issues such that corporates are on board for the ecological transition
- ▶ Inject momentum by defining a national secondary teaching and research strategy for climate with the objective of training 100% of students on ecological issues
- ▶ Create a framework that incentivises the transition, for example, by valuing interdisciplinarity work and teaching in the career of professor-researchers
 - Offer a financial support to universities - especially public ones - to aid them in their transition

ACCREDITATIONS & RANKINGS

Encourage and value



- ▶ Grant more importance to ecological issues than to any other criteria in the evaluation
- ▶ Precisely define how ecological issues will be assessed, placing planetary boundaries at the center
- ▶ Value the integration of ecological issues in all academic curriculum
- ▶ Quantitatively and qualitatively assess the impact of actions undertaken
- ▶ Ensure transparency in the approach, methodology, and data, and use cross-referencing



CORPORATES & FINANCIAL INSTITUTIONS



Train, recruit, finance

- ▶ Thoroughly train the Board of directors and Executive Committee on ecological issues
- ▶ Engage their organisation in a coherent and ambitious strategy respectful of planetary boundaries, and make their practices evolve accordingly
- ▶ Organise continuous training of all staff on ecological issues to be able to lead this transition
- ▶ Systematically recruit staff trained on ecological issues, and communicate around it
- ▶ Finance research on ecological issues in finance, respecting research independence
- ▶ Integrate, in a systemic manner, the ecological issues to their strategy and across operations

PROFESSIONAL CERTIFICATION BODIES



Redefine the norm

- ▶ Embed ecological issues to all certifications
- ▶ Devote 25% of certification content to ecological issues
- ▶ Go beyond ESG index, aim for impact :
 - Ensure proper understanding of physical constraints, their implications on economic and financial activities, and of the systemic nature of the ecological transition
 - Encourage critical thinking with regards to the integration of ecological issues in finance, and promote practices that allow for real redirection of capital flows towards activities that underpin the ecological transition

The Shift Project is a think tank working towards a post-carbon economy. As a non-profit organization recognized as being in the public interest and guided by the demands of scientific rigor, our mission is to enlighten and influence the debate on the energy transition in Europe. Our members are large companies that want to make the energy transition their priority.
www.theshiftproject.org

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