



**HAL**  
open science

## Envisioning the occupations of the future together

Damien Brochier

► **To cite this version:**

Damien Brochier. Envisioning the occupations of the future together. *Training & Employment*, 2020, 144, 4 p. halshs-02975530

**HAL Id: halshs-02975530**

**<https://shs.hal.science/halshs-02975530>**

Submitted on 22 Oct 2020

**HAL** is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

## Envisioning the occupations of the future together

### The case of the waste recovery and recycling sector



Damien BROCHIER  
(Céreq)

In a national and international economic context in which jobs and skills are changing rapidly, prospective analysis is an approach that the economic partners and public authorities in France use on a regular basis. Between 2017 and 2019, Céreq and France Stratégie trialled a new prospective approach. It is based on the involvement of a group of experts and economic and social actors in a particular sector who come together in order to produce and share a forward-looking vision for the long, medium and short term.



EMPLOYMENT  
FORECAST

TREND IN  
QUALIFICATIONS

OCCUPATION IN  
THE ENVIRONMENTAL  
SECTOR

CLEANSING REFUSE  
AND WASTE  
MANAGEMENT

The need for a forward-looking vision of the evolution of jobs and occupations is now more topical and pressing than ever before. After all, such a vision will enable companies and their employees to anticipate as best they can the multiple effects of the digital, environmental and demographic changes with which they are confronted and to pinpoint the dynamics around which the changes in occupations are organised.

When it comes to prospective analysis at sector level, France has some very well-proven tools at its disposal, such as prospective study contracts, which have been co-funded by the Ministry of Labour and the various sectors since 1988. Over the last fifteen years, furthermore, measures have been implemented at local level by the regional employment and training observatories (*Observatoires régionaux emploi formation* or OREFs) [1].

In order to extend the scope of these tools, and with a view to enriching them, Céreq and France Stratégie were involved between 2016 and 2019 in trialling an approach entitled “A shared vision of the future of jobs and skills” (*Vision prospective partagée des emplois et des compétences*, known in French by the initialism VPPEC, cf. Box 1). This approach has two principal dimensions: firstly, more direct involvement of the economic and social partners and, secondly, an extended time horizon that makes it possible to combine a long-term vision with an assessment of short-term needs. This article reports on both the methodological

requirements and the results of this approach, which finds tangible expression in the waste recovery and recycling sector that lies at the heart of the challenges posed by the environmental and energy transition (cf. Box 3, page 4). This transition clearly illustrates the value, for the actors in a sector facing significant changes, of adopting a prospective approach.

#### Putting together a working group at the convergence of three “worlds”

The founding act of the VPPEC process is to identify and select the partners best able to act as contributors to this “shared vision of the future”. The objective here is to identify which organisations, institutions and networks are best able to give an account of the history, current functioning and likely future changes in the jobs, occupations and skills associated with a particular sector of the economy. The case of the waste recovery and recycling industry clearly illustrates this process of putting together a group located at the convergence of three “worlds”.

The first “world” is made up of economic and social actors in the sector. In this case, they included the training managers in the employers’ federations in the sectors in questions, representatives of trade union organisations with seats on the joint bodies dedicated to training as well as managers and executives in large companies whose detailed vision of the economic challenges proved decisive.

## 1 Shared vision of the future of jobs and competences - (VPPEC): an experiment in 3 sectors

In 2016, the employment and competences section of the French National Council for Industry (Conseil national de l'industrie\*/CNI) decided to trial a process for creating a shared vision of the future of jobs and competences (VPPEC) in the digital technology sector. France Stratégie and Céreq were contracted to conduct the experiment. A team made up of staff from both organisations was assembled to trial the approach.

A second strand of the experiment was launched in 2017-2018 with the actors in the waste recovery and recycling sector. A methodological guide, drawing on the results of these experiments, has also been produced. Finally, this time in response to a referral from the Prime Minister to the Ministry for Sport, a third trial took place in sport-related occupations in 2018-2019.

The results have been published by France Stratégie and Céreq in the series of reports produced by the Employment and Skills Network (Réseau Emploi Compétences). They have given rise to 3 sector reports with the generic title: "Vision Prospective partagée des emplois et des compétences"/"Shared vision of the future of jobs and skills":



- *The digital technology sector* (2017). Rapporteurs: Sandrine Aboubadra Pauly, Nicolas Le Ru and Marième Diagne (France Stratégie); Damien Brochier and Joachim Haas (Céreq).
- *The waste recovery and recycling sector* (2018). Rapporteurs: Sandrine Aboubadra Pauly and Marième Diagne (France Stratégie); Damien Brochier and Michaël Segon (Céreq).
- *Sport-related occupations* (2019). Rapporteurs: Sandrine Aboubadra Pauly and Marième Diagne with the assistance of Elsa Garros (France Stratégie); Damien Brochier and Mickaële Molinari (Céreq).

A methodological guide outlining the approach has also been published:

- *Construire une vision prospective partagée des emplois et des compétences: les apports méthodologiques d'une expérimentation* (2018). Authors: Sandrine Aboubadra-Pauly (France Stratégie) and Damien Brochier (Céreq)

\* The French National Council for Industry, a permanent body offering expertise and consultancy services to government, is made up of economic and social partners drawn from the world of industry (divided into 16 sectors) and representatives of the ministries of education, higher education and labour.

\* OPCO • Joint body providing support services for vocational training.

The second "world" is that of the education and training partners, namely representatives of the ministries that play a role in the construction and regulation of the public certification system of qualifications relating to the sector undergoing analysis. Alongside them, an adviser from Opcalia\*, whose task it is to assist with training development in the sectors in question, provided a broader view of the approaches adopted by companies and employees seeking to maintain and develop skills. Finally, the representative of an apprentice training centre (CFA) that plays a recognised role with the companies in the sector also brought her expertise to the table.

A third set of actors, grouped together under the generic heading of "experts", constituted a third and indispensable pillar. It was made up of representatives of institutions identified as having the capacity to analyse the themes in question. Thus in the case of the waste recovery and recycling sector this group included representatives of the Agency for the Environment and Energy Management (*Agence de l'Environnement et de la Maîtrise de l'Energie/ADEME*) and of a partnership association acknowledged for its expertise within the industry (Rudologia).

Since 1 April 2019, Opcalia has been incorporated within the OPCO\* for labour-intensive service companies and their employees.

## Producing a shared vision in stages

Once the group had been assembled, the next task was to establish a clear joint working framework for all its members. This framework was established by making explicit the rules governing an approach combining a collective focus on the future with an awareness of present dynamics. Thus participants were invited to take part in work sessions organised into three stages (cf. Box 2).

In the first stage, exchanges within the group were initiated with the aim of identifying the major trends within the sector over the long term. In the second stage, the discussions were focused more tightly on a more specific aim, namely identifying the dynamics of change in occupations and skills to which companies would have to pay particular attention in the medium term. In the third and final stage, the debate concentrated on pinpointing the training and upskilling tools and measures likely in the short term to begin to support the dynamic of change in the occupations identified in the preceding stage.

Throughout this whole process, one crucial issue in terms of leadership of the group was how to deal with a sort of reversal of the standard way of providing expertise. In this case, the experts were the participants themselves, since the ultimate aim of the approach was to make them the "authors" or originators of a shared vision. They had to understand that the construction of this vision would depend on their continuing participation and active contribution to the group's work. In fact, the implementation of this approach combining the long, medium and short term among the actors in the waste recovery and recycling sector actually did enable them to produce a shared vision of the future around these three time horizons.

## In the long term: adapt occupations to the development of the circular economy

The actors in the sector who were members of the group acknowledged the need to look ten years ahead in order to support the development of a currently embryonic circular economy [2]. The challenge was, it is true, primarily economic and financial in nature. For the central state, local authorities and companies, the challenge was to establish the right level of investment in equipment and facilities in order to accommodate the gradual spread of waste recycling. Nevertheless, and this economic dynamic notwithstanding, it was crucial that future changes in occupations and competences should be taken into account in order to ensure the sector's economic viability.

While team work on tasks broken down into individual operations is still often the rule today, it was necessary, in particular, to think ahead about how occupations would be defined and the conditions under which they would be practised.

In future, functionally flexible professionals, capable of working independently and using modernised, automated transport and sorting tools, would have to be able to collect and sort waste by themselves and in complete safety.

### In the medium term: upskill occupations by enhancing the status of skilled jobs

Even though they believed that changes were already under way, the members of the working group acknowledged that their sector's image was still blighted by a combination of often difficult working conditions and the lack of prestige attached to skilled jobs. Drawing on the detailed analysis of the medium-term evolution of 12 occupations whose recruitment needs were going to increase, they identified two problems to be dealt with jointly over the medium term.

The first concerned the ways in which new entrants, who will be increasing well trained and qualified before entering the labour market, are to be integrated into companies. One concrete example of the challenge to be met is that of the positioning of holders of the recently introduced vocational *baccalauréat* in pollution management and environmental protection, which was intended to equip holders to work as team leaders in companies in the sector. Observations on the ground show that young holders of this qualification tend rather to be classified as “operatives +”, who function as assistants to middle management. Thus the working group highlighted the importance for companies of gradually changing their recruitment criteria, which still attach very considerable importance to “on the job” training while according very little added value to holders of formal qualifications for basic jobs within the sector.

However, the members of the group emphasised that a second challenge was to construct, on a

greater scale than hitherto, systems for upskilling employees already in post. For them, the numerous industry-level qualifications that have seen the light of day (in particular vocational training certificates developed by FEDEREC\*) could serve as a basis for preparing employees to move up to jobs requiring increased autonomy at work [3].

### In the short term: managing the transformation of jobs involving the sorting of household waste

The issue on which there was a consensus was that of the redevelopment – sooner rather than later – of a number of household waste sorting facilities [4]. The discussions within the working groups highlighted the extent to which the apparent uniqueness of each situation actually conceals a more profound issue. Management of the future careers of the individuals concerned must become a common and shared concern for all the various actors involved: the local authorities responsible for planning and monitoring waste management, as well as the service providers and social integration companies that are often active in this sector. Mere reclassification measures that enable individuals to find short-term employment with the support of different institutions are not sufficient. More ambitiously, the aim should be to structure the construction of internal mobility trajectories within the sector, taking advantage in particular of the opportunities opened up by recent recognition of training in the workplace. The group identified one essential point in particular, namely the ability to establish bridges between organisations involved in the integration of individuals into the labour market, which play an important role in providing access to employment for low-skilled workers, and companies in the market sector that offer long-term jobs.

\* FEDEREC • Fédération professionnelle des entreprises du recyclage (French federation of recycling industry)

## 2 The 3 stages in the construction of a shared vision of the future of jobs and skills

|                       | Time horizon                    | Action   | Upskilling<br>Evolution of occupations and training   |
|-----------------------|---------------------------------|--|---|
| 1 <sup>st</sup> stage | Long term<br>(5-10 years and +) | Identification of the structural technological and economic trends influencing the sector      | Ideal-typical representation of “new occupations”   |
| 2 <sup>nd</sup> stage | Medium term<br>(3-5 years)      | Drawing up the action frameworks that will drive the development of the occupations identified | Mapping of the occupations and/or skills that constitute the “heart” of the sector’s activities |
| 3 <sup>rd</sup> stage | Short term<br>(1-2 years)       | Consideration of possible partnerships for operational purposes                                | Devising of training programmes or upskilling measures in response to short-term challenges     |

### 3 The occupational divisions of the waste recovery and recycling sector associated with the approach

Representatives of four divisions took part in the VPPEC approach:

- Recovery industries and businesses (IDCC\* 637)
- Waste disposal activities (IDCC 2149)
- Thermal equipment (IDCC 0998 et IDCC 1256)
- Industrial decontamination and maintenance (IDCC 2272)

The working group prioritised an analysis centred on the occupations associated with three major phases of activity: waste collection and transport, waste sorting and preparation and material and energy recovery.

Urban cleanliness, repair and reutilisation (recovery sector), as well as the trade in recycled materials, were not investigated in detail within this working framework.

\* Identification code for the collective agreement.

### What use of forecasting?

What can we learn from the experiment with this new way of creating forecasts carried out by France Stratégie and Céreq ?

From the point of view of the actors involved in trialling the approach, the end result is broadly positive. They have declared their interest in this form of “participatory co-construction”, which they say they had seldom encountered until then. They regard it as particularly appropriate because it enabled them to distance themselves from the institutional positions that are frequently adopted in other contexts. Furthermore, they regard it as well-suited to the task of considering the actions to be taken in situations of accelerated change in occupations and competences.

With regard to the approach itself, the differentiation between three separate time horizons produced some interesting effects in the sense that the discussion of the long-term trends, which tended to be consensual, made subsequent discussions of

the medium and short-term challenges easier. In the medium term, its main value lies in its ability to formalise a general survey of the changing occupations. For all that, it did not, within the time allowed, allow the working group to examine in detail the skills associated with them. Similarly, while it highlights certain short-term priorities, they are not translated into operational actions.

Thus the whole question of the use and effects of a prospective approach has still to be answered. Although little time has elapsed since the end of the experiment, it is evident that the conclusions are shared all the more widely when participants diffuse and discuss them within their respective professional communities (professional organisations, trade unions, OPCOs, training organisations, consultants, ministries etc.). Media reports of the results of a VPPEC approach presented during an open session at the end of the process would surely encourage appropriation of the results.

Finally, there is the question of the actual effects of this type of prospective analysis on the actors’ practices. While the objective of the approach is to centre on the short and medium term by formalising the issues linked to upskilling, it does not explicitly offer the actors concerned any dedicated resources to deal with the problems raised. One avenue for further exploration would be funding, either from the public purse or from the sector itself, to help companies with the training required; such funding would be conditional on the completion of a VPPEC. The shared vision, one of the real breakthroughs from this experiment, could be extended, at least to some extent, by putting in place training programmes or developing enhanced job contents, measures that would be quickly appreciated by employees and companies alike. Furthermore, the prospective analysis of occupations could cement its legitimacy by becoming one of the major components of companies’ approaches to social responsibility. —●

#### → Further reading

[1] *Prospective des métiers et des qualifications : quelle démarche suivre à l'échelon régional ?* F.Lainé, A. Valette-Wursthén, avec la collaboration de T. Klein, Céreq-CGSP, 2014.

[2] *50 mesures pour une économie 100% circulaire*, Feuille de route économie circulaire, ministère de l'Économie et des finances, 2018.

[3] *Négocier, réguler, accompagner. La relation formation-emploi au prisme des branches professionnelles*. 4<sup>e</sup> Biennale Formation-Emploi du Céreq, F. Séchaud (dir.), Relief n° 53, 2016.

[4] *“Accompagnement de la reconversion des centres arrêtant leur activité de tri des déchets d’emballages ménagers et de papiers graphiques”*, ADEME, Eco-Emballages, Deloitte (M.Hestin, G. Thonier), Eurecka (T.Oudart, D. Rallu), Note d’informations, 2017.

Subscribe to  
our newsletter

Céreq

SINCE 1971  
Get to know the training - employment - work links better.  
A scientific collective at the service of public action.

+ info and all studies  
on [www.cereq.fr](http://www.cereq.fr)



National public institution under the supervision of the  
Ministry of Education and the Ministry of Employment.

T&E N° 144 | 2020 | Newsletter on employment and training research from Céreq

Publications manager:  
Florence Lefresne  
Translation:  
Andrew Wilson

Reproduction permitted provided that the source is cited / Published free of charge  
Registration of copyright 1<sup>er</sup> trimestre 2019 / ISSN 2119-0496  
Centre d'études et de recherches sur les qualifications  
10, place de la Joliette CS 21321 • 13567 Marseille Cedex 02 / T. +33 (0)4 91 13 28 28  
All of our publications are available on our web site at [www.cereq.fr](http://www.cereq.fr)