# DG Clima workshop on the Innovation Fund in the Netherlands

Date en location: June 28th 2019, Rotterdam (premises of Shell Netherlands B.V.)

#### **Present:**

On behalf of DG Clima: Mr C. Holtzleitner, Mr R. Doubrava and Ms M. Boneva.

On behalf of industrial companies in the Netherlands: representatives of Ampyx, Avantium, AVEBE, Ecovat, Eneco, ENGIE, Navigant, Nouryon, Porthos, REDstack, Shell, Stork, TataSteel, Twence, Vattenfall, VNCI and VNP.

On behalf of the Netherlands Ministry of Economic Affairs and Climate Policy, and the Netherlands Enterprise Agency: Mr D. Pappie (chair), Mr P. Besseling, Mr M. de Boer, Mr E. Buddenbaum, Mr M. Clement, Ms Z. Faragó, Mr P. Heemskerk, Ms L. Langezaal, Mr R. Prins, Mrs M. Roza-Molenschot.

#### 1. Nature of the meeting

During the meetings of the Innovation Fund expert panel DG Clima has expressed an interest to participate in workshops, conferences et cetera for presentations and discussions on the Innovation Fund (IF). To this end, the Netherlands Ministry of Economic Affairs and Climate Policy has invited DG Clima for a workshop in the Rotterdam area at the premises of Shell Netherlands B.V. in Pernis. The main purpose of the workshop was to give DG Clima the opportunity to present the main features of the IF, to be informed by the Dutch industry on various projects that could benefit from the IF, and to discuss the terms and conditions of the Fund.

#### 2. Agenda

- 1. Bus tour at premises of Shell (refinery)
- Opening and presentation by chairman David Pappie (Director Top Sectors and Industrial Policy at the Ministry of Economic Affairs and Climate Policy) on Dutch climate, innovation and industry policy
- 3. Presentation on the Innovation Fund by Christian Holzleitner, DG Clima
- 4. Presentations from industry and energy sector on examples of projects suitable for IF
- 5. Discussions on the challenges for the industry and energy sector in relation to the IF
- 6. Conclusions and closing by chairman

### 3. Highlights from presentation by Mr D. Pappie on Dutch climate, innovation and industry policy

Mr Pappie announced that at the very same day of the workshop, on the 28<sup>th</sup> of June, the Dutch cabinet reached an agreement on its renewed climate policy. The Dutch national climate agreement includes steps to be taken in almost every economical and societal domain to meet the EU climate policy goals and the Paris 2015 Climate Agreement. These domains include among others industry, mobility, electricity, the agricultural sector and build environment.

Key messages by Mr Pappie included that the climate goals are too big for one company, sector or country. Therefore, there is a need for international cooperation on industrial level as well as on international policy level. In addition, there is a need for innovation to drive down the costs to reach these goals. This is a cornerstone in Dutch climate policy regarding the industrial sector: the policy should work both for the climate and the economy. This is exactly why the IF is highly appreciated by the Dutch authorities.

#### 4. Highlights from presentation by Mr C. Holzleitner on the Innovation Fund

Mr Holzleitner responded to the previous speaker that indeed, the EU climate policy should be working both for the climate and the economy. The EU should show other economies that there is such a model, keeping the EU as a global industrial leader also on the transition towards a net zero emission economy. The IF is designed to support industry with the transition. The EU should not wait however, for 2030 or 2050, but act now.

Therefore DG Clima aims for a 1<sup>st</sup> call of the IF in June 2020. This 1<sup>st</sup> call should be very open and very broad. It should include large scale applications, in cross sectoral projects and also 1<sup>st</sup> of a kind precommercial projects. To this end, a comprehensive set of criteria is required on both technology and business for the evaluation of project proposals. DG Clima will develop these criteria during the second half of 2019.

Mr Holzleitner made it clear that the IF is not state aid. The IF is highly compatible. It can be combined with loans from InvestEU, and funding from MS on e.g. regional development. Focus in IF is on additional costs. The IF should also be highly flexible. For instance: the payment scheme is designed as 40% advance payment that is independent of the project results and 60% that is dependent on verified emissions reduction. If extra advance payments would be required because of cash flow prognoses, a share of the 60% could be paid out before entry into operation but of course would have to be paid back in case less emissions were avoided than agreed upfront.

### 5. Presentations from industry and energy sector on examples of projects suitable for IF

Representatives from industry presented a layout of projects that could be submitted under the IF scheme. Presented ideas for large scale projects ranged from CCUS by Port of Rotterdam together with partners EBN and Gasunie, to the usage of high temperature electrical furnace for deep decarbonization (Shell). Also project ideas on the production of green hydrogen by means of large scale electrolysis (Nouryon, ENGIE), and the usage of hydrogen in steel making (TataSteel) or power generation (Vattenfall), were presented. In addition, Avantium, AVEBE, Stork and VNP presented ideas for projects which can also significantly contribute to the Dutch and EU climate goals.

# 6. Discussions on the challenges for the industry and energy sector in relation to the IF

Mr Ybema (Nouryon) and Mrs Westenbroek (VNP) presented some observations and challenges on the cases presented by the industry and the energy sector, and asked some remaining questions on the IF that were shared among the participants of this event.

One of the observations was that with so many different project ideas from various industrial sectors, a diversity of costs, risks/uncertainties and dependencies exits. Costs and therefore required support from the IF range from Capex to Opex. Clearly, subsidies are preferred but combining these with national and other subsidy schemes may cause additional uncertainties, for which reason loans could also be of interest. Risks and dependencies originate from a diverse range, namely from the technologies themselves being at lower maturity levels, from price movements of renewable power compared to conventional power production, from the ETS, from the availability of a (very) large electrical infrastructure, from the development of a real H<sub>2</sub> market based on common market principles such as supply and demand, from being part of a complex industrial system and being highly integrated with suppliers and other partners within the value chain, and also from the fact that the IF schedule on calls and grant decisions is very likely to be different from the schedule on investment decisions and turn-arounds at these companies.

In particular, the following issues were addressed and discussed to which DG CLIMA responded:

- scale-up vs innovation
  - Scale-up is crucial for cost-effectiveness but could also be very location specific: the applicant should make clear in his project proposal: what is the innovation mainly about? Is it on the business case, or on the technology level? For the IF, quite mature projects are preferred, especially when having finished FEED phase. However, both type of projects are aimed for. There should be no bias for one type of project. At any case, the project should be cost effective.
- Capex vs Opex support, and applying for subsidy and/or loans
   The type of support from the IF and cost items which are to be supported, has to be tailored towards the project needs. This also includes flexibility on the payment scheme as discussed previously. Cost uncertainties could be added as unforeseen costs but be paid only if Capex/Opex rises above a base case scenario. It is expected that from 2021 InvestEU can supply loans.
- Large scale projects from corporates or consortia vs SMEs and small scale projects There should be no bias. The IF is open for both individual and multiparter projects, whether these are large consortia or SME's. In addition, there is no preference to where these projects take place, consequently projects eligible for the IF fund can take place in all regions of the EU, whether from highly to lower developed areas. The IF does not include a maximum amount of funding per project, but that is unlikely to be more than € 300 mln.
- Ranking:
  - This is an issue that is currently looked at by DG Clima. There will be no pre-set division of budget among domains or type of projects. As for the issue, how to compare different projects: possibly projects are compared amongst each other and ranked amongst sectors, after which for each of these sectors the top of these listed proposals are selected for funding.
- State aid rules
  - State aid rules should be obliged to. However, the IF is not State aid. There are no limits on State aid from the IF, more likely funding from Member States will be more restrictive. Cost effectiveness of a proposal will be higher if financial support from the Member State is higher.
- IP vs knowledge sharing
   DG Clima is aware of these concerns. The IF will not demand far-reaching public openness on knowledge sharing.
- Emission avoidance and environmental benefit Companies must be able to show the emission avoidance. It is still to be decided how to calculate and report these emission avoidance along the value chain e.g. for cross-sectoral projects. This issue is currently discussed with the EU expert institute. The results of these discussions will be further discussed by public consultation and meetings with the IF expert panel. A similar procedure will be followed for calculating relevant costs including issues such as price differences of a fossil based monomer and a different, renewable based monomer which has a similar usage.

## 7. Conclusions and closing by chair

Mr Pappie concluded that the workshop had been very successful and resulted into useful and lively discussions. Mr Pappie thanked the representatives from DG Clima for their time and willingness to join the workshop, and to share their views on the Innovation Fund. Mr Pappie also thanked the representatives from industry to present their project ideas and to participate in the discussions, and his colleagues at the Department and especially all people from Shell for organising and hosting the workshop.