



LIFE14/ENV/IT/000346

An innovative and sustainable

continuous process for the development of high quality trimethyl phosphite

AFTER LIFE - COMMUNICATION PLAN









THE SCOPE

This post LIFE communication plan has the scope to identify a communication strategy to continue the project dissemination after the project ending and to outline the future activities to guarantee the continuation of the dissemination actions once the project is completed and therfore enriched by the obtained positive results.

THE METHODOLOGY AND THE OUTLINED AFTER LIFE COMMUNICATION STRATEGY

The after LIFE plan is based both on the achievements reached along the project and on the outcomes from the

- Market scenarios Report
- Replication models envisaged possibilities
- Market survey feedbacks
- Networking actions in progress
- Already adopted dissemination and communication strategy

and aims to increase consistently the project's results dissemination in the society of the European citizens by

- cross fertilization actions
- pure communication actions
- stewardship actions
- joint partnerships and collaborations with specific stakeholders at various level, involving industry as well as citizens and opinion leaders.

As a fact R&D and Innovation actions take advantage from well-organised communication strategies with related key actors to faciliate a successful market entry and to stimulate the spill over effects of the novel life trialkyl solution both on the upstream and downstream segments..

1 Market scenarios influence on the communication plan: targeted segments and geographic areas

The Trialkyl phosphites are an important example of key intermediates used in the chemical industry in a large variety of applications, to make:

- A) flame retardants and fire resistant materials
- B) stabilizers for PVC
- C) organophosphorus herbicides and pesticides (such as Monocrotophos and DDVP)
- D) specific APIs in the pharmaceutical field

Moreover they are used as cathalists for polimerization reactions and reagents for organic synthesis. Further uses include: dyestuffs, optical brighteners, lubricants and plasticizers for nylon. In consequence of the above considerations, the segments that will be targeted by the after LIFE communication plan are, principally:

PVC producers
Polymers producers
Elastomers producers
Specialty chemicals industry
Crop Protection industry
API pharmaceutical industry

2 Replication models envisaged possibilities

From a commercial and geographic perspective, considering the better sustainability of the LIFE TRIALKYL phosphites and the main consuming market, that is Europe, the communication plan will focus first on the european context (SHORT TERM) to be extended in a second phase (MEDIUM TERM to LONG TERM) to Asia and America, the latter being the market with the strictest regulations directly and indirectly referring to Phosphites.

The communication campaign will, then, follow the replication models developed along the project.

3 Market survey feedbacks

In consideration of the pilot start phase, ITAL elaborated questionnaires to be distributed among the industrial stakeholders, academia, suppliers and end-users with the objective of collecting information on the market needs, and forecasts and finally evaluate the market uptake of the sustainable TRIALKYL TMPi product in preparation of the AFTER LIFE COMMUNICATION PLAN.

During the market surveys, the stakeholders were grouped in categories, i.e. chemical industry, policy makers, end-users, materials science, and engineering scientists, specialized scientists on VOCs, toxic chemicals and health effects. The market surveys allows ITAL to estimate the return of investment of the TRIALKYL TMPi and to possibly define future research paths in terms of reaction performance, potential substitution of raw materials and sustainability. The output will be used by ITAL Finance Manager, together with the technical staff, also to assess the replication potential of the novel technology and elaborate market forecasts. In addition to this, the project partners can evaluate the impact of the TRIALKYL TMPi on their market of action and its diffusion both in the EU markets and globally.

A SMART electronic Survey format was adopted based on different criteria such as price evaluation, tool's flexibility, fitting with the scope, easiness in the usage, adaptability to both paper and electronic divulgation, easily exchanged among the partners. The tool, provided by SMART SURVEY ENTERPRISE, (https://www.smartsurvey.co.uk), is actually meeting the LIFE TRIALKYL needs, as it allows a customized adaptation to the different contexts we need to explore, starting from a basic concept that we could adapt to our needs without any expense and can constitutes itself a valid communication vehicle.

The survey, whose indicative snapshot is reported below, was divulgated during several LIFE TRIALKYL dissemination and communication events, providing useful feedback to define the after LIFE Communication plan.



Fig.1 The electronic survey-snapshot

- Looking at the market segments (Fig.2) which the interviewed panel belong to, it is clear that Chemical synthesis, PVC and Plastic additives ones are the major interested, therefore, having to define deadlines and priorities the following pathway is set:
 - a. Specialty chemicals Plastic additives: SHORT TERM communication actions
 - b. PVC- packaging: MEDIUM TERM communication actions
 - c. CROP protection and P-products: LONG TERM communication actions

The highlighted deadlines for coverage of the relevant market segments are because approaching PVC Packaging and CROP protection-P products will require a higher effort and a different approach in terms of communication tools and divulgation channels

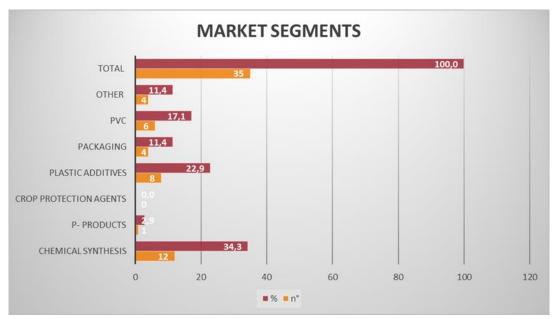


Fig.2. distribution of LIFE TRIALKYL TMPi market segments –survey feedbacks

| SHORT TERM | MEDIUM TERM | LONG TERM |
|---------------------|-------------|--------------------------|
| Specialty chemicals | PVC | Crop protection |
| Chemical synthesis | Packaging | P- products (lubricants) |
| Plastic additives | | Pharmaceuticals |

- Looking at the "level of interest in testing" (Fig.3) expressed by the interviewed panel it is evident that the testing interest is highly specific down to standard, while the "low" interest got a very poor rate. This feedback can be indirectly linked to the high level of specialization of the potential users, which oblige us to think about
 - a. a range of
 - high level communication tools
 - rich in technical content
 - specifically addressed
 - b. selective divulgation channels
 - c. selective speakers

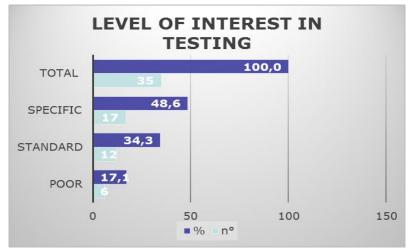


Fig.3. level of interest in testing LIFE TRIALKYL TMPi -survey feedbacks

- ➤ Looking at the reasons for the expressed interest by the interviewed potential stakeholders and opinion leaders (Fig.4) it is shown a strong sensitivity toward the environmental issues and benefits deriving from the adoption of the novel LIFE TRIALKYL process. It is interesting that the social impact come second to the environmental issue, followed by the economic impact that is not considered as important as the other two ones. This suggests to enlarge the audience of the after LIFE Communication strategy to those fields of actions which cover
 - a. the reduction of the environmental impact
 - b. the improvement of the circular economy concept
 - c. the innovation in Chemistry as a leverage to increase the European citizens welfare
 - d. the sustainability evaluation of any process involved upstream and downstream to the LIFE TRIALKYL

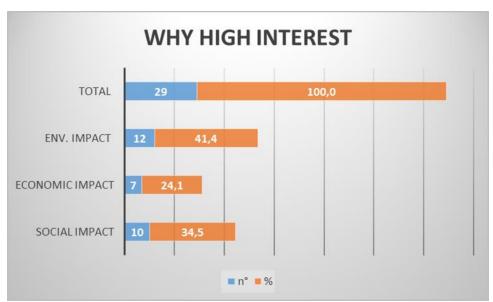


Fig.4. reasons for the level of interest in testing LIFE TRIALKYL TMPi -survey feedbacks

4 Networking actions in progress

The networking actions in progress represent a still valid field of action for the after LIFE communication plan, as the lack of results till the final phase of the project blocked the development of any further action. Considering the field in which the network was developed along the project, the next communication session should developed the interactions within:

- a) Specific european financed projects
- b) Sectorial based european platforms as well as
- c) European and Domestic relevant Institutions

and dealing with

- the Phosphorus Chemistry,
- the Water management (Industry-Urban-Agri)
- the Health and Safety regulatory issues.

Considering the various existent platforms in Europe and outside Europe active in the selected fields, a potential after LIFE plan could follow the reported sequence:

| SHORT TERM | MEDIUM TERM | LONG TERM |
|-------------------------|--------------|-----------|
| ESPP- european | MOREPLATFORM | SUSCHEM |
| ISPP-national | SUSCHEM | ESPP |
| WE- WssTP- Water Europe | ECP4 | ECHAS |
| ECHAS | EUBAT | ECP4 |

5 Already adopted Dissemination and Communication strategy

The wide tools developed along the project and not yet completely divulgated should be used in ashort term perspective in the following actions:

- a) Exchanging public deliverables, and main achievements, through the dissemination campaign by using newsletters, brochures and Layman's report
- b) Sharing of projects' logos on consortia websites
- c) Inviting expert speakers to talks at project conferences and workshops

In addition the already planned, but only partially realized tools should be completed and divulgated on the project website as well as at selected fairs and international conferences by the partners in line with their field of action.

- Video: For example, the project team is evaluating to prepare a video in the after-LIFE phase, in order to promote the benefits obtainable thanks the new process and product. The video will be the final product of the project and will represent a digital report of the success of the project. The video will be published on partners' websites and on the project website and it will be a tool useful to promote the importance of European financing programs, as LIFE or Horizon, in enhancing R&D&I activities. Producing the video in the after-Life phase will allow partners to mention the project participation during the
- **LIFE Chemicals Indicator Workshop** that will be organized in Vilnius on 28th and 29th November 2019.
- Moreover, Partners will organize a final demonstration workshop at the Pilot's site in ARESE. The demonstration will be based on the running of the pilot accompanied by a full description of the steps down to the presentation of products samples collected from the previous processes. The workshop will be performed by adopting inert reagents in the process so that a real 100% simulation will be performed in front of stakeholders, end users and also opinion leaders as defined in the list of invites. The audience will be composed of selected stakeholders (e.g.: Major of Arese, Lombardy Region and ENEA officials, unionists, other authorities, companies interested in final products...), invited using the mailing lists created for the Mid-term and the Final Conference.
- This workshop will be one of the contents that will be shared on **LIFE-Trialkyl LinkedIn page**. This will be another tool that will be used for dissemination activities in After-LiFE communication. The page will tell the story of the Project and the results obtained and, periodically, the team will upload the dissemination deliverables (e.g. flyer, brochure, Layman's report) and other news.