

European Network on New Sensing Technologies for Air Pollution Control and Environmental Sustainability - *EuNetAir*

COST Action TD1105

Focus Group Meeting on

Innovation on Environmental Sensor Technologies

WGs and MC Meeting at LINKOPING, 3 - 5 June 2015

Action Start date: 01/07/2012 - Action End date: 30/06/2016 - Year 3: 2014-15 (Ongoing Action)

Concept of Innovation on Environmental Sensor Technologies



Agenzia nazionale per le nuove tecnologie,
l'energia e lo sviluppo economico sostenibile

Marco Alvisi

Function in the Action: SIG 1 Leader

ENEA - Italy

 **cost**
EUROPEAN COOPERATION IN SCIENCE AND TECHNOLOGY



 **cost**
EUROPEAN COOPERATION IN SCIENCE AND TECHNOLOGY

Motivations

Why?

- To assess the key factors in sensor technology and the relative state of the art in an effective and exhaustive way!
- To depict, as excellence and comprehensive community, a collective Vision in order to define a Roadmap of suggested Implementation Actions!
- To map existing approaches and methodologies in Innovation in AQC and propose new ones!
- To map the strenghtness and weakness factors of the European Technology in sensors for ACQ!

Expected Deliverables

- An Innovation and Technology Report on European sensor technology for Air Quality Monitoring;
- A Scoping Paper with Vision, Roadmap and suggested EU actions to boost the “Societal Innovation Stars” (research, education, industries, institutions, citizens) in AQC;
- A publishable review article on innovation in sensor technology for AQC based on verifiable data (techno-grams, innovation methods, etc.);
- Increase and share in the community, the awareness of the existing and developing methodologies to produce innovation in the AQC;
- A “smart specialisation platform” for sensor technology in AQC: rationale and synergies with existing initiatives

Methodologies

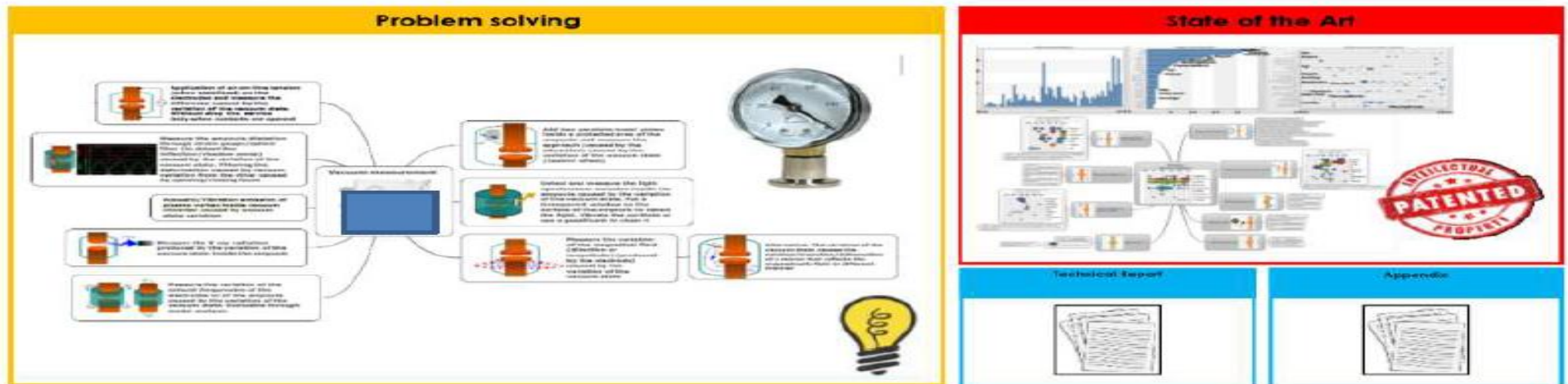
Approaches and methodologies (that we can alternatively use)

Knowledge search for supporting audit phase



Infographs of the knowledge base

KB about VACUUM MEASUREMENT



© BiGFLO Srl, Italy

Proposed table of contents of the Report -1-

Proposed Table of Contents: Innovation Technology Reports

1. **Management Summary (Executive Summary) - 1 page**
REFERENCE POINT: Penza
2. **Vision and Strategic Goals - 1 page**
REFERENCE POINT: Penza
OTHER CONTRIBUTORS: Schuetze, Karatzas, Borrego, Hertel, Chowdhury, von Sicard
3. **Typical Applications - 3 pages**
REFERENCE POINT: Schuetze
OTHER CONTRIBUTORS: Karatzas,
4. **Political, Economic and Technical Framework - 2 pages**
 - a) European Regulation and EU Ambient Air Directive
 - b) Other Definitions ???REFERENCE POINT: Borrego
OTHER CONTRIBUTORS: Hertel, Karatzas, Hans-Guido Muecke (WHO-CC), Romano
5. **Key Challenges/Solutions and Priorities in the Different Segments of the AQC "Technology Chain":**
 - **Indoor Air Quality Applications - 5-10 pages**
 - REFERENCE POINT: Schuetze
 - OTHER CONTRIBUTORS: Kock, von Sicard, Noren,
 - Research, Development and Innovation
 - Companies
 - Academy
 - Agency
 - **Outdoor Air Quality Applications - 5-10 pages**
 - REFERENCE POINT: Hertel
 - OTHER CONTRIBUTORS: Karatzas, Borrego, Castell, Schneider, Theunis,
 - Research, Development and Innovation
 - Companies

Proposed table of contents of the Report -2-

Academy Agency

- Standards and Protocols - 2 pages (APPENDIX B ??????)
Research, Development and Innovation
Companies
Academy
- REFERENCE POINT: Ingrid Bryntse, (to be asked/confirmed)
- OTHER CONTRIBUTORS: WG4 members/sub-leaders: Saffell, Moser, Romain, (ibc)

- Educational Needs - 2 pages
REFERENCE POINT: Romano
OTHER CONTRIBUTORS: Karatzas, Hertel, Schuetze, Borrego
 - a. for company
 - b. for agency
 - c. for research

- Societal Needs - 2 pages
REFERENCE POINT: Karatzas
OTHER CONTRIBUTORS:
 - a. Indoor Air Quality Applications
 - b. Outdoor Air Quality Applications

6. Main Industrial Needs and Related R&D Challenges and Skills

REFERENCE POINT:
OTHER CONTRIBUTORS:

7. Main Research Needs in Terms of Instruments, Infrastructures

REFERENCE POINT:
OTHER CONTRIBUTORS:

8. Best European and World Practices in Sensor Technology (1 page/COST Country)

Country Analysis (COST Parties joined to EuNetAir)
REFERENCE POINT: Penza



Proposed table of contents of the Report -3-

OTHER CONTRIBUTORS: MC/WG Leaders - *ITALY FORMAT* by Penza

9. **Representation, Communication etc.**
REFERENCE POINT: Karatzas
OTHER CONTRIBUTORS:
10. **Conclusions / Recommendations - 1 page**
ALL
11. **Relevant Bibliography (*more recent, no limit*)**
REFERENCE POINT: Chowdhury
OTHER CONTRIBUTORS: ALL
12. **APPENDIX A: Map of the EU Research Infrastructures and Companies**
REFERENCE POINT: Chowdhury
OTHER CONTRIBUTORS: ALL
13. **APPENDIX B (if any)**

Comments concerning the bibliography: (list of review and book chapter to score with collective priorities in order to define the more relevant publications).



TIMELINE OF REPORT

- **FIRST VERY PRELIMINARY DRAFT - LINKOPING, 3-5 June 2015**
- **Maximum deadline for Collection: 31 of May 2015 !!!!**
- **SECOND DRAFT 12-13 OCTOBER 2015 DURING WG MEETING Belgrade**
- **(Circulation in the entire Action)**
- **DECEMBER 2015 - FOCUS GROUP MEETING ON INNOVATION (SCOPING PAPER, VISION, ROADMAP, IMPLEMENTATION ACTION).**
- **Place/Venue to be defined: Sofia (Bulgaria) could be !**
- **MARCH 2016 - FIRST VERSION OF THE REPORT, WIEN, Austria**
- **MAY 2016 - FINAL VERSION Report at BRUXELLES (to be defined/confirmed)**
- **Potential Action Extension (*December 2016 ???*)**



THANK YOU FOR YOUR
ATTENTION!

Thanks to Foysol, Andreas, Kostas,
Carlos for their initial contributions