



A Network of Technology and Quality

# PAVING THE WAY FOR SUSTAINABLE DEVELOPMENT AT ISQ

Afonso Lobato de Faria  
Director of Environment, Energy  
and Safety

# CONTENTS



- **1. Introduction**
- **2. ISQ Overview**
- **3. Environmental Projects**
- **4. Energy Projects**
- **5. Conclusions**



## 1. Introduction

**This presentation will try to answer the following question:**

**What have ISQ done in the past, is doing in the present and still want to do in the future for sustainable development?**



## 2. ISQ Overview

**Founded in 1965**

**Around 700 staff teamed with customers, partners  
and alliances in more than 20 countries worldwide**

**Privately owned, being a non profit technical and  
scientific association**

**Turnover: 45 Million Euro (2004)**



## 2. ISQ Overview

**ISQ is a technical inspection, testing and consultancy organization, providing premier technical services to assure quality, safety and the environment in constructions and industries worldwide.**



### 3. Environmental Projects

**PURE  
WATER**

**CLEAN AIR**

**GREEN  
COMPANIES**

**NO  
NOISE**

**ZERO  
WASTES**

**HEALTHY  
SOIL**



## 3. Environmental Projects

### Clean Air

- **1. DIOXINES** - Effects of operational factors on the formation of toxic organic micropollutants in EAF steelmaking
- **2. WELDOZONE** - Examination of the measurement and control of ozone emissions during welding and allied processes
- **3. ERAMAC** – Organic species emissions reduction through analysis, modelling and control



## 3. Environmental Projects

### Clean Air

- **4. NOX** - Minimizing NOx emissions from reheating furnaces
- **5. OLASIS** - Optimized sensor locations and sampling methods in industrial stack for environmental monitoring
- **6. RESPEC** – Advanced Predictive Tool to Optimise Combustion and Emission Performance of Industries





## 3. Environmental Projects

### Pure Water

- **7. ECOZONE** - Ecological manufacturing of deinked pulp using ozone
- **8. PIWAMAS** - Process integrated closed cycle water management system for dry docks
- **9. TRANSCAT** – Integrated Water Management of Transboundary Catchments



## 3. Environmental Projects

### Pure Water

- **10. NEWATER** - New approaches to adaptive water management under uncertainty
- **11. TREBAWA** – Treatment of Ballast Water
- **12. SESCOWA** – Selective separation of high-value Compounds from Complex Waste Waters by Halophilic Microorganisms



## 3. Environmental Projects

### Pure Water

- **13. WWTREAT** - Waste Water Treatment Improvement and Efficiency in Small Communities



## 3. Environmental Projects

### Zero Wastes

- **14. AWARENET** - Agro-food wastes minimization and reduction network
- **15. PACKTECH** – Assimilation and Standardisation of Environmentally Friendly Packaging Technologies Within the Food Industry
- **16. ADAGE** – Decision support for waste management



## 3. Environmental Projects

### Zero Wastes

- **17. INQUISS** - In-situ, quick sensing system for measurement of process-critical components in steel making slags
- **18. INQUISS.A** – On-line slag analysis utilizing contact free microwave technology
- **19. DEMES** – Development of a methodology for establishment of a system to determine solid waste composition



## 3. Environmental Projects

### Green Companies

- **20. PRODESTS** - Set-up of a Market-Oriented Methodology for joining SMEs within Integrated EU research Projects on Innovative Clean and Environmental Technologies
- **21. ALFA** – Extension and optimisation of the pyrometallurgical processes and routes aiming at the stainless steel production
- **22. ISACOAT** – Network on integrated scenario analysis of metal coating



## 3. Environmental Projects

### Green Companies

- **23. LEADOUT** - Low Cost Lead-Free Soldering Technology to Improve Competitiveness of European SME
- **24. ETIV** – EMAS Technical Implementation and Verification
- **25. GREEN** – Development of an implementation methodology for the environmental management system in Europe R&D sector



## 3. Environmental Projects

### Healthy Soil

- **26. ROLCOSMOS** - Innovative Industrial Technologies for the Rehabilitation of Land Contaminated from Polymetallic Sulphide and Processing Operations
- **27. TRESOR** – Technique for remediation of steel-works polluted sites





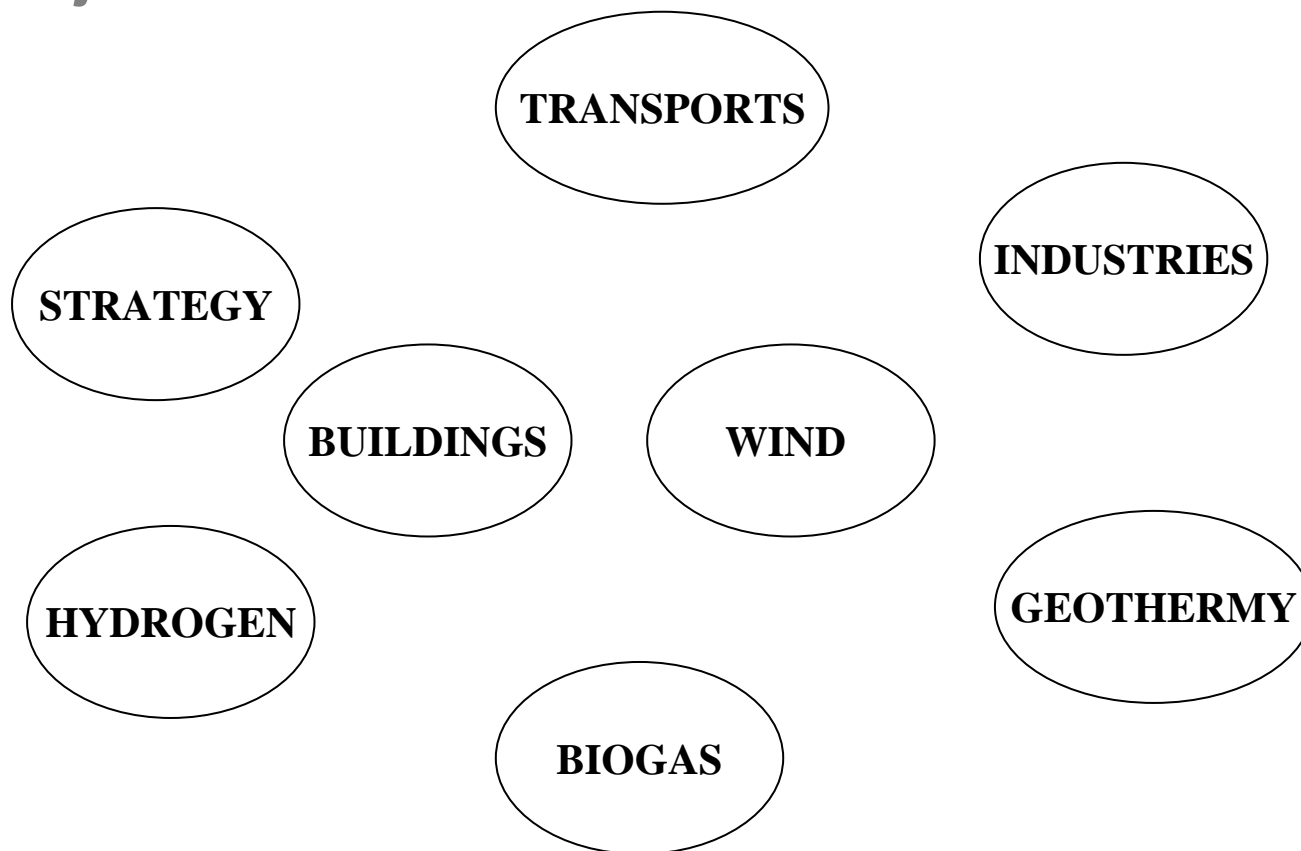
## 3. Environmental Projects

### No Noise

- **28. FRIENDCOPTER** – Integration of technologies in support of passenger and environmentally friendly helicopter



## 4. Energy Projects



## 4. Energy Projects

### Strategy

- **29. INTUSER** - Information Network on the Technology of Utilization and Sustainability of Energy Resources
- **30. SOUSTENERGY** – New strategies for the spreading of energy efficiency in Europe
- **31. TRIGEMED** – Promotion of tri-generation technologies in the tertiary sector in the Mediterranean countries



## 4. Energy Projects

### Biogas

- **32. AGRO** – Nutritional strategies towards energy recovery of biogas resulting from pig manures

### Transports

- **33. ATCOS.T** – Development of an Absorption Transport Cooling System for Trailers



## 4. Energy Projects

### Wind

- **34. WINDTECHNOW** – Regional wind technology and knowledge transfer strategies

### Geothermy

- **35. GEOTHERMAL** – Feasibility study on installing geothermal mini-power plants in Hungary



## 4. Energy Projects

### Buildings

- **36. BESTFACADE** – Best practice for double skin facades

### Industries

- **37. FIBRESAVE** – Process recovery and optimisation of mass and energy in pulp & paper industry

### Hydrogen

- **38. NATURALHY** - Preparing for the hydrogen economy by using the existing natural gas system as a catalyst



## 5. Conclusions

- **For ISQ the sustainable development area is a main priority**
- **ISQ makes a strong effort to incorporate the R&D results in its services**
- **ISQ will continue to work in this field with our partners from C3P**





A Network of Technology and Quality

[www.isq.pt](http://www.isq.pt)