# Food Refrigeration Innovations for Safety, consumer Benefit, Environmental impact and Energy optimization along cold chain in Europe

## Fact Sheet

### Project Information

<table>
<thead>
<tr>
<th>FRISBEE</th>
<th>Funded under FP7-KBBE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grant agreement ID: 245288</td>
<td>Overall budget € 8 165 746,20</td>
</tr>
<tr>
<td>Project website</td>
<td>EU contribution € 5 992 082</td>
</tr>
</tbody>
</table>

**Status**
Closed project

**Start date**
1 September 2010

**End date**
31 August 2014

**Coordinated by**

<table>
<thead>
<tr>
<th>INSTITUT NATIONAL DE RECHERCHE EN SCIENCES ET TECHNOLOGIES POUR L'ENVIRONNEMENT ET L'AGRICULTURE</th>
</tr>
</thead>
</table>
Objective

The objective of the FRISBEE (Food Refrigeration Innovations for Safety, consumers’ Benefit, Environmental impact and Energy optimisation along the cold chain in Europe) project is to provide new tools, concepts and solutions for improving refrigeration technologies along the European food cold chain. At all stages the needs of consumer and European industry will be considered.

The project will develop new innovative mathematical modelling tools that combine food quality and safety together with energy, environmental and economic aspects to predict and control food quality and safety in the cold chain. The FRISBEE partners will develop new and emerging refrigeration technologies providing energy efficient and sustainable alternatives to current technologies.

The project is constructed around 8 work packages. Management is covered in work package 1. Work package 2 will develop innovative databases of current technologies to enable later comparison between new and current technologies. Work package 3 will develop Quality and Energy/Environment Assessment Tools (QEEAT). In work packages 4 and 5 the team will develop new and emerging refrigeration technologies for representative cold chains selected for applicability to the European food industry. Work from work packages 4 and 5 will be further developed and demonstrated in work packages 6 and 7. Work from the project will be disseminated widely in work package 8.

The project involves 26 partners from 12 EU member, associated and candidate countries. Within the consortium, 13 of the partners are companies, 2 are NGOs or represent other companies (mainly SMEs) and the remainder are research based partners. The consortium includes 6 SME partners. The international expertise and synergy of the 26 FRISBEE partners enables the work to be exploited on a European level. Therefore it is expected that the European food industry, related cold chain actors and consumers will all benefit from the FRISBEE project.

Field of science

/natural sciences/computer and information sciences/databases
Programme(s)

Topic(s)

Call for proposal

FP7-KBBE-2009-3

Funding Scheme

CP-IP - Large-scale integrating project

Coordinator

INSTITUT NATIONAL DE RECHERCHE EN SCIENCES ET TECHNOLOGIES POUR L'ENVIRONNEMENT ET L'AGRICULTURE

Address
Rue Pierre Gilles De Gennes 1
92761 Antony Cedex
France

Website
Contact the organisation

Administrative Contact
Graciela Alvarez (Dr.)

Participants (25)

KATHOLIEKE UNIVERSITEIT LEUVEN

Address
Oude Markt 13
3000 Leuven
Belgium

Website
Contact the organisation

Activities

Research Organisations

Higher or Secondary Education Establishments

EU contribution
€ 769 552
€ 601 798

Participants (25)
<table>
<thead>
<tr>
<th>Organisation</th>
<th>Country</th>
<th>EU contribution</th>
<th>Address</th>
<th>Activity type</th>
</tr>
</thead>
<tbody>
<tr>
<td>NEDERLANDSE ORGANISATIE VOOR TOEGEPAST NATUURWETENSCHAPPELIJK ONDERZOEK TNO</td>
<td>Netherlands</td>
<td>€ 479 601</td>
<td>Anna Van Buerenplein 1 2595 DA Den Haag</td>
<td>Research Organisations</td>
</tr>
<tr>
<td>LONDON SOUTH BANK UNIVERSITY LBG</td>
<td>United Kingdom</td>
<td>€ 600 709</td>
<td>Borough Road 103 SE10AA London</td>
<td>Higher or Secondary Education Establishments</td>
</tr>
<tr>
<td>PSUTEC SPRL</td>
<td>Belgium</td>
<td>€ 256 525</td>
<td>Le Trou 2 4190 Ferrières</td>
<td>Private for-profit entities (excluding Higher or Secondary Education Establishments)</td>
</tr>
<tr>
<td>Organisation Name</td>
<td>Country</td>
<td>EU Contribution</td>
<td>Address</td>
<td>Activity Type</td>
</tr>
<tr>
<td>-------------------</td>
<td>---------</td>
<td>-----------------</td>
<td>---------</td>
<td>---------------</td>
</tr>
<tr>
<td>NATIONAL TECHNICAL UNIVERSITY OF ATHENS - NTUA</td>
<td>Greece</td>
<td>€ 413 560</td>
<td>Heroon Polytechniou 9, Zographou Campus, 15780 Athina</td>
<td>Higher or Secondary Education Establishments</td>
</tr>
<tr>
<td>SINTEF ENERGI AS</td>
<td>Norway</td>
<td>€ 349 663</td>
<td>Sem Saelandsveg 11, 7465 Trondheim</td>
<td>Research Organisations</td>
</tr>
<tr>
<td>AGENCIA ESTATAL CONSEJO SUPERIOR DEINVESTIGACIONES CIENTIFICAS</td>
<td>Spain</td>
<td>€ 305 121</td>
<td>Calle Serrano 117, 28006 Madrid</td>
<td>Research Organisations</td>
</tr>
<tr>
<td>COSTAN SPA</td>
<td>Italy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organisation Name</td>
<td>Country</td>
<td>EU contribution</td>
<td>Address</td>
<td>Activity type</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>----------------</td>
<td>-----------------</td>
<td>----------------------------------------------</td>
<td>-------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>NANOBIOMATTERS SL</td>
<td>Spain</td>
<td>€ 109 442</td>
<td>Calle Louis Pasteur 11 Nave 6 46980 Paterna (Valencia)</td>
<td>Private for-profit entities (excluding Higher or Secondary Education Establishments)</td>
</tr>
<tr>
<td>ARCELIK A.S.</td>
<td>Turkey</td>
<td>€ 123 480</td>
<td>Karaagac, Sutluce Beyoglu Cad. No:2-6 34445 Istanbul</td>
<td>Private for-profit entities (excluding Higher or Secondary Education Establishments)</td>
</tr>
<tr>
<td>ASSOCIATION DE COORDINATION TECHNIQUE POUR L'INDUSTRIE AGROALIMENTAIRE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
AGROALIMENTAIRE
France
EU contribution
€ 148 906
Address
16 Rue Claude Bernard
75231 Paris
Activity type
Other
Website
Contact the organisation
Administrative Contact
Christophe Cotillon (Mr.)

VLAAMS CENTRUM VOOR BEWARING VAN TUINBOUWPRODUCTEN
Belgium
EU contribution
€ 233 211
Address
Willem De Croylaan 42
3001 Heverlee
Activity type
Research Organisations
Website
Contact the organisation
Administrative Contact
Bert Verlinden (Dr.)

SPREAD EUROPEAN SAFETY GEIE
Italy
EU contribution
€ 90 160
Address
Viale Luigi Pasteur 10
00144 Roma
Activity type
Research Organisations
Contact the organisation
Administrative Contact
Antonietta Branni (Ms.)

CRISTOPIA Energy Systems
France
EU contribution
€ 93 688
Activity type

<table>
<thead>
<tr>
<th>Organisation</th>
<th>Activity Type</th>
<th>EU Contribution</th>
<th>Address</th>
<th>Administrative Contact</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>INSTITUT INTERNATIONAL DU FROID</strong></td>
<td>Public bodies (excluding Research Organisations and Secondary or Higher Education Establishments)</td>
<td>€ 70 131</td>
<td>Boulevard Malesherbes 177 75017 Paris</td>
<td>Didier Coulomb (Mr.)</td>
</tr>
<tr>
<td><strong>CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE CNRS</strong></td>
<td>Research Organisations</td>
<td>€ 172 193</td>
<td>Rue Michel Ange 3 75794 Paris</td>
<td>Armelle Barelli (Ms.)</td>
</tr>
<tr>
<td><strong>SPES SOCIETA COOPERATIVA PER AZIONI</strong></td>
<td>Private for-profit entities</td>
<td>€ 356 271</td>
<td>Via Broganelli 84</td>
<td></td>
</tr>
</tbody>
</table>
CAMFRIDGE LTD
United Kingdom
EU contribution
€ 267 958

Address
St. John’s Innovation Centre
Cowley Road
CB4 0WS Cambridge

Activity type
Private for-profit entities
(excluding Higher or Secondary Education Establishments)

Website
Contact the organisation

Administrative Contact
Neil Wilson (Dr.)

SAINT TROFEE VOF
Netherlands
EU contribution
€ 189 875

Address
Oude Kanonsdijk 62 A
7205 AR Zutphen

Activity type
Private for-profit entities
(excluding Higher or Secondary Education Establishments)

Website
Contact the organisation

Administrative Contact
Sietze Marlom Van Der Sluis (Mr.)

VYSOKA SKOLA CHEMICKO-TECHNOLOGICKA V PRAZE
Czechia
EU contribution
€ 42 800
Address
Technicka 5
166 28 Praha
Website
Administrative Contact
Hana Opatova (Mrs.)

**SZENT ISTVAN UNIVERSITY**

- Hungary
- EU contribution € 32 641
- Address Pater Karoly Utca 1
  2100 Godollo
- Activity type Higher or Secondary Education Establishments
- Website
- Administrative Contact
  Tibor Várszegi (Dr.)

**BONDUELLE SA**

- France
- EU contribution € 24 936
- Address La Woestyne
  59173 Renescure
- Activity type Private for-profit entities (excluding Higher or Secondary Education Establishments)
- Contact the organisation
- Administrative Contact
  François Letissier (Mr.)

**FATLAND JAEREN AS**

- Norway
- EU contribution € 24 937
- Address Hommersakveien 250
  4311 Hommersak
- Activity type Private for-profit entities (excluding Higher or Secondary Education Establishments)
Marfo B.V
Netherlands
EU contribution
€ 27 900
Address
Koperstraat 31
8211 AK Lelystad
Activity type
Private for-profit entities
(excluding Higher or Secondary Education Establishments)
Website
Contact the organisation
Administrative Contact
Arnold Zuidegeest (Mr.)

ITP NV
Belgium
EU contribution
€ 120 000
Address
Belgicastraat 1
1930 Zaventem
Activity type
Private for-profit entities
(excluding Higher or Secondary Education Establishments)
Website
Contact the organisation
Administrative Contact
Frédérique Desmedt (Ms.)