

## INTRODUCTION

Salinas Valley in the USA is a dry desert area. Still it provides almost all of the romaine lettuce for North America. But how can this be since lettuce needs a lot of water to grow?

*Look at this wonder of nature.*



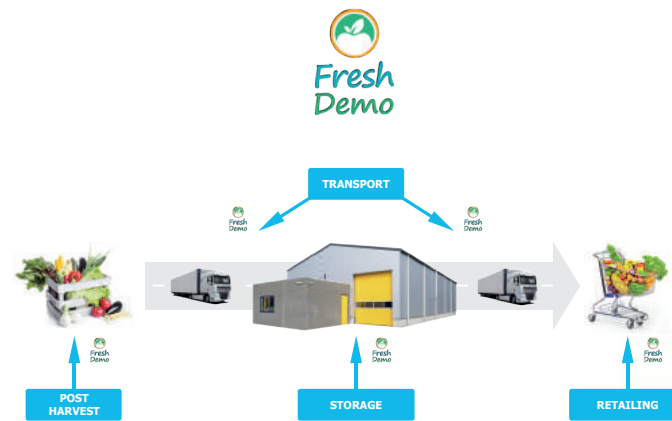
Each morning this desert valley is filled with fog from the ocean. The small mist droplets are greedily sucked in by the lettuce. Dry mist technology imitates this beautiful natural process. The mist keeps produce cool and fresh after its harvest. In fact, the fresh produce feels so good that it keeps on growing, even on the supermarket shelves. You actually harvest your vegetables from the display shelf! At home you will appreciate a fresher taste and the produce keeps for days longer.



## PROJECT DESCRIPTION

Around 160 million tons of fruits and vegetables are harvested and distributed throughout Europe every year. More than 40% do not end up on a plate. They are wasted in the logistics process after harvest, or are of an inferior quality on reaching the consumer.

Dry mist is generated through an innovative technology of ultrasonic humidification/sanitation. It provides a cool, humid, and bacteria-free climate and with that has the ability to significantly reduce waste in the distribution chain by extending the shelf life and hygienic properties of fruit and vegetables. The Fresh Demo project will evaluate the benefits of this technology, together with a natural acidifier to preserve and enhance the quality and freshness of fruit and vegetables along the entire post-harvest supply chain.



The market potential of this technology will be demonstrated by this research through different real case studies. The project team will analyse the ecological, technological and economic benefits and also conduct in-depth market research. This will provide the basis for an extensive training, promotion, and dissemination program aimed at multipliers and potential clients, thus achieving a successful introduction to the market.

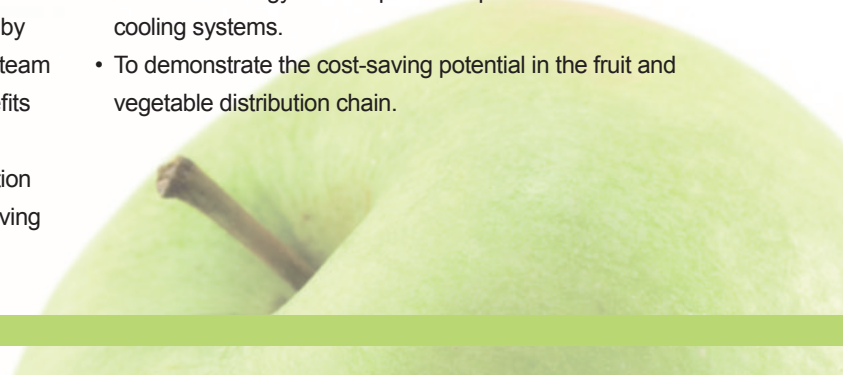
## GENERAL OBJECTIVES

- Disseminate and promote knowledge on how dry mist technology affects the ecological and economic sustainability of vegetable and fruit distribution in the food industry.
- Evaluate the cost saving potential and thereby increase the competitiveness of the European fruit and vegetable sector.
- Introduce the technology as an eco-efficient product to the whole distribution chain of the European fruit and vegetable sectors.
- Market introduction of the technology to the fruit and vegetable sector in Italy, Greece, Spain, Germany and the Netherlands and subsequently to the complete EU-28.

## SPECIFIC OBJECTIVES

Real scale demonstrations of the dry mist technology will be executed along a continuous food supply chain in order to achieve the following specific objectives:

- To increase the freshness, shelf life and hygiene, as well as the sensory properties of fruits and vegetables by providing a continuous cool, humid and sanitary environment along the whole supply chain.
- To reduce avoidable bio-waste generated because of inadequate storage and transport conditions.
- To suppress microbial growth by means of a natural acidifier
- To reduce unnecessary packaging material.
- To enhance the shelf life of fruit and vegetables.
- To reduce energy consumption compared to conventional cooling systems.
- To demonstrate the cost-saving potential in the fruit and vegetable distribution chain.



## PARTNERS



Contronics Engineering BV  
[www.contronics.nl](http://www.contronics.nl)



RFT Frischetechnik GmbH  
[www.rft.net](http://www.rft.net)



Verein zur Förderung des  
Technologietransfers an der  
Hochschule Bremerhaven e.V.  
(ttz Bremerhaven)  
[www.ttz-bremerhaven.de](http://www.ttz-bremerhaven.de)



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[www.bioazul.com](http://www.bioazul.com)



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[www.univegtradeitalia.com](http://www.univegtradeitalia.com)



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[www.univeg.de](http://www.univeg.de)



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Technical University of Denmark (DTU)  
[www.dtu.dk](http://www.dtu.dk)



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[www.freshfel.org](http://www.freshfel.org)



# Fresh Demo



# Fresh Demo

VISIT THE FRESH DEMO WEBSITE

[www.fresh-demo.eu](http://www.fresh-demo.eu)

**Waste reduction and quality improvement  
of fruits and vegetables via an innovative  
and energy-efficient technology of  
humidification/natural acidifier misting.**



### Project Coordinator:

Contronics Engineering B.V.  
Postal address: P.O. Box 144  
5490 AC Sint-Oedenrode  
The Netherlands

### Visiting address:

Ambachtsweg 8  
5492 NJ Sint-Oedenrode  
The Netherlands

T: +31(0)413 - 487 000

F: +31(0)413 - 473 903

E: [info@contronics.nl](mailto:info@contronics.nl)

I: [www.contronics.nl](http://www.contronics.nl)



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