



# THE FUTURE OF FRESH

**bluwrap**

BLUWRAP | PRESENTATION





Life Extension of Fresh Protein





**THIS IS  
BLUWRAP.**







# DOUBLE SHELF LIFE.

**BluWrap technology proven  
to more than double the  
shelf life of fresh proteins.**





**PORK**



**SALMON**



**HOW IT WORKS.**





A close-up, artistic photograph of an hourglass. The hourglass is made of clear glass and is positioned vertically. Fine, dark-colored sand is captured in mid-fall, creating a dynamic, blurred trail as it moves from the upper bulb to the lower bulb. The lower bulb is partially filled with a layer of sand. The background is a soft, out-of-focus gradient of warm colors, ranging from a deep blue at the top to a golden-brown at the bottom, suggesting a sunset or sunrise. The lighting is dramatic, highlighting the texture of the sand and the contours of the glass.

**MOST PEOPLE BELIEVE THAT  
TIME IS WHAT SPOILS FRESH  
PROTEINS. IT'S NOT.**



# A UNIQUE TECHNOLOGY

- 1** Prevents oxidative processes and reduces microbial spoilage by modifying the atmosphere surrounding the product.



- 2** Slows down enzymatic activity by the use of optimal holding temperatures (-1 C).







# **DAY 30 BLUWRAP SALMON**

This is a photo of fresh BluWrap salmon fillets after 21 days in BluWrap, plus 9 days, making a 30 day shelf life.

**40 days shelf life for H&G**





**INCREASES  
PRODUCT  
VALUE**



**DECREASES  
COSTS**



**REDUCES  
IMPACT**



# A REDUCED IMPACT



## Less CO<sub>2</sub>

Truck/sea; 65%  
Air/sea; 90%  
Truck/ train; 70%  
Air/train 80%



## More recycling.

Recyclable cardboard boxes  
instead of Styroform and ice in  
the fish industry



## Less waste.

1.3 billion tons of the food  
produced in the world is  
wasted each year



## Reduce logistics costs.

From air to sea reduces  
logistic cost by up to 70%





# A DATA- PROVEN TECHNOLOGY

Salmon; we have done 8 independent tests at the Norwegian University of Science and Technology (NTNU), 2 tests at the Norwegian Veterinary Institute and 5 test shipments to Europe, USA and Canada.

Pork; We have done 9 tests in collaboration with industry partners in USA and Europe.

**AS GOOD AS FRESH SALMON AND PORK ON ICE**



# BLUWRAP AMONG THE 25 MOST INNOVATIVE AG-TECH STARTUPS BY FORBES







# **A NECESSARY TECHNOLOGY**





## Demand drivers.

- Want more fresh, “minimally processed” food
- Rising per capita consumption of animal protein in markets with poor domestic production
- Premium pricing for strong environmental story





## The challenges.

- Short shelf life fresh animal protein
- High levels of waste
- Costly to move fresh to market fast
- Freezing degrades quality and price





OPPORTUNITIES

# NEAR TERM



- We now have a proven technology that double the shelf life of salmon and pork
- We have designed and are manufacturing the first automated production line
- The first prototype will be installed in a customer slaughterhouse early next year as part of a Launching business agreement with BluWrap



# Milestones



Proven technology for  
salmon and pork

Science, testing and  
development

Commercial agreements



Making a business case for  
customers to use BluWrap  
technology  
Industrial demonstrations



**OUR TIME IS NOW.**







# bluwrap

[info@bluwrap.com](mailto:info@bluwrap.com)

