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# The business case for sustainable chemistry: global trends, drivers, and barriers

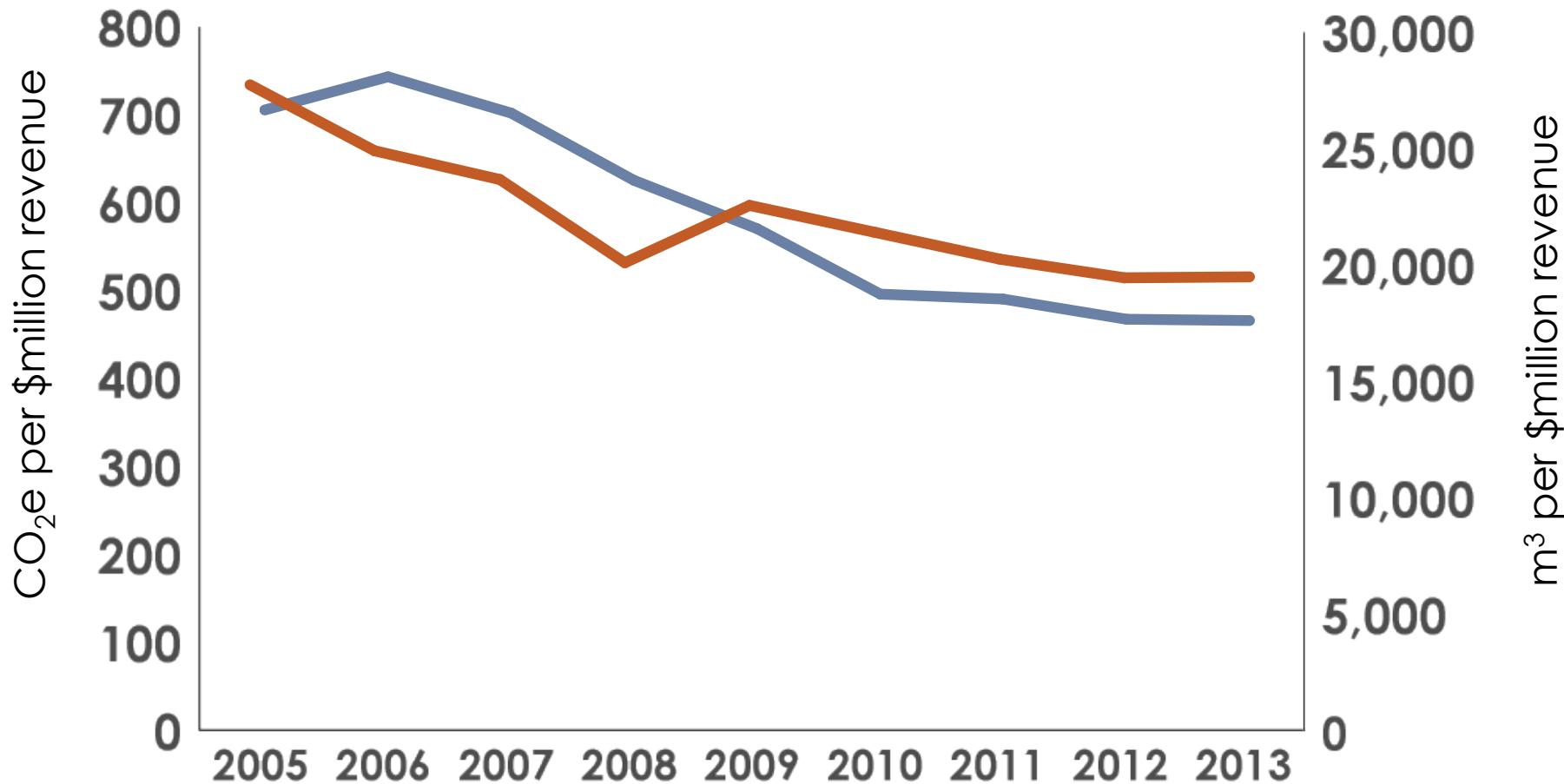
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Chief Operating Officer  
Trucost Plc

24<sup>th</sup> September 2015

# GLOBAL CHEMICAL SECTOR TRENDS



— GHG scope 1 & 2 (LHS) — Water scope 1 & 2 (RHS)



# OPPORTUNITIES AND RISKS



AMERICAN  
SUSTAINABLE  
BUSINESS  
COUNCIL

**GC3**  
GREEN CHEMISTRY &  
COMMERCE COUNCIL  
Business Mainstreaming Green Chemistry

**TRUCOST**

## Opportunities

## Risks

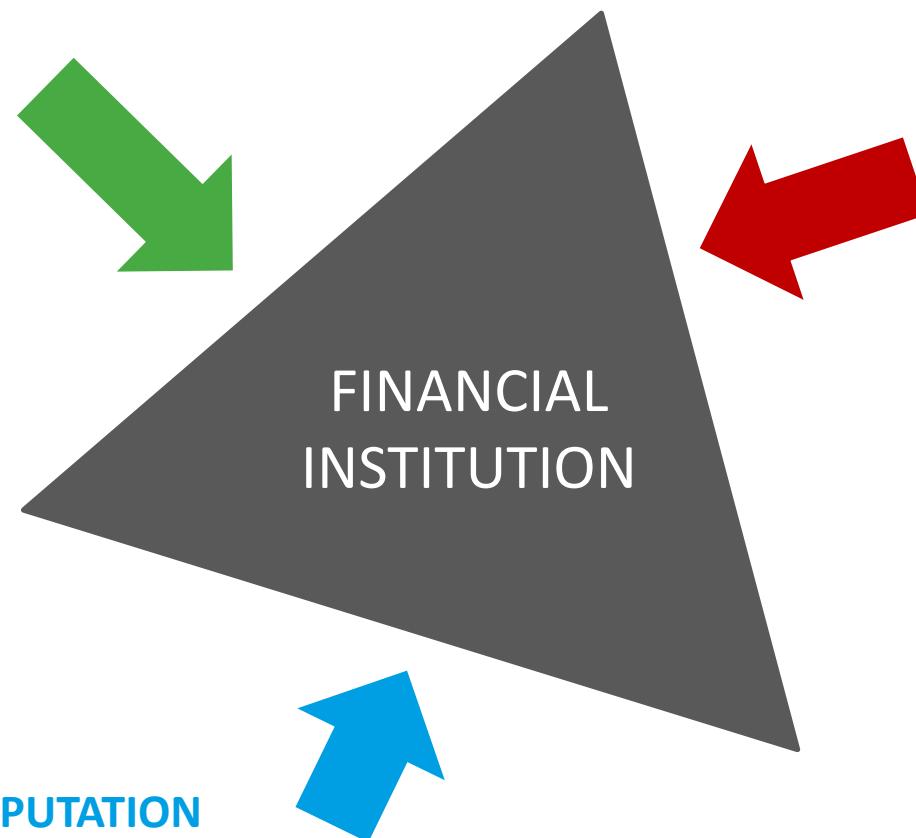
### Theme

1. Market growth
2. Trends in capital flows
3. Market demand
4. Job growth
5. Shareholder and NGO activism
6. Chemical restrictions
7. Business value at risk
8. Societal costs of accidents and incidents

# IMPACT ON CAPITAL FLOWS

## GROWTH

- ✓ New client services
- ✓ Low carbon business opportunities
- ✓ Environmental trading
- ✓ Low carbon client solutions
- ✓ ESG asset management
- ✓ Resource efficiency
- ✓ Partnership opportunities
- ✓ Green bonds



## RISK

- ✓ Natural capital exposure
- ✓ Climate volatility
- ✓ Policy risks
- ✓ Insurance costs
- ✓ Resource cost volatility
- ✓ Client resilience
- ✓ Mega trends

## REPUTATION

- ✓ Stakeholder pressure
- ✓ Peer ranking
- ✓ Talent retention
- ✓ Branding and image

# BUSINESS VALUE AT RISK



In 2015, the global water crisis was cited as the number-one **business risk** for impact



**70% of companies surveyed** identify water as a substantive business risk

Global Water Crisis impact upon  
**US-based Fortune 500 companies:**

**94%** face potential physical challenges

**80%** affects their decisions on where to locate facilities

**69%** face reputational risks

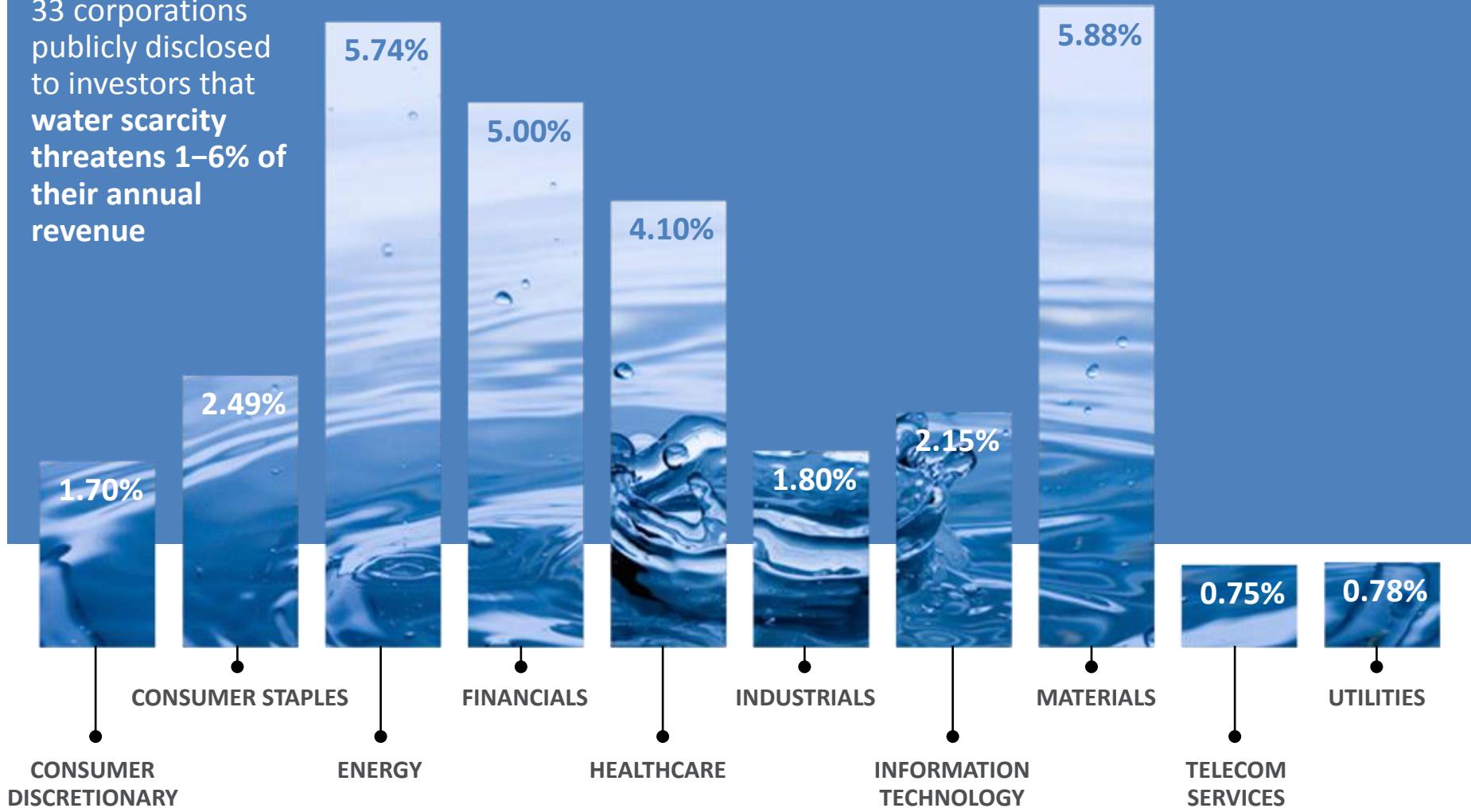
**60%** affects business growth and profitability within five years

SOURCES: *World Economic Forum  
2013 CDP Water Report*

*Bridging Concern with Action: Are US Companies Prepared for Looming Water Challenges?, Pacific Institute and VOX Global 2014 survey of US-based Fortune 500 companies*

# CDP DISCLOSED REVENUE AT RISK (2014)

33 corporations publicly disclosed to investors that **water scarcity threatens 1–6% of their annual revenue**





# WATER RISK MONETIZER

# WaterRiskMonetizer.com

**ECOLAB**<sup>®</sup>

**TRUCOST**<sup>TM</sup>

Water Risk Monetizer x [waterriskmonetizer.com](http://waterriskmonetizer.com)

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Informing better business decisions.

The Water Risk Monetizer provides actionable information to help businesses understand and quantify water-related risks in financial terms to inform decisions that enable growth and enhance the vitality of communities. Valuing risk starts here.

Water Risk Monetizer

## THE MONETIZATION OF RISK

Water scarcity is a constraint to growth for businesses around the world. Challenges accessing the water businesses need, in the places they need it, with regard for others who share it, threaten business vitality across industries and geographies.

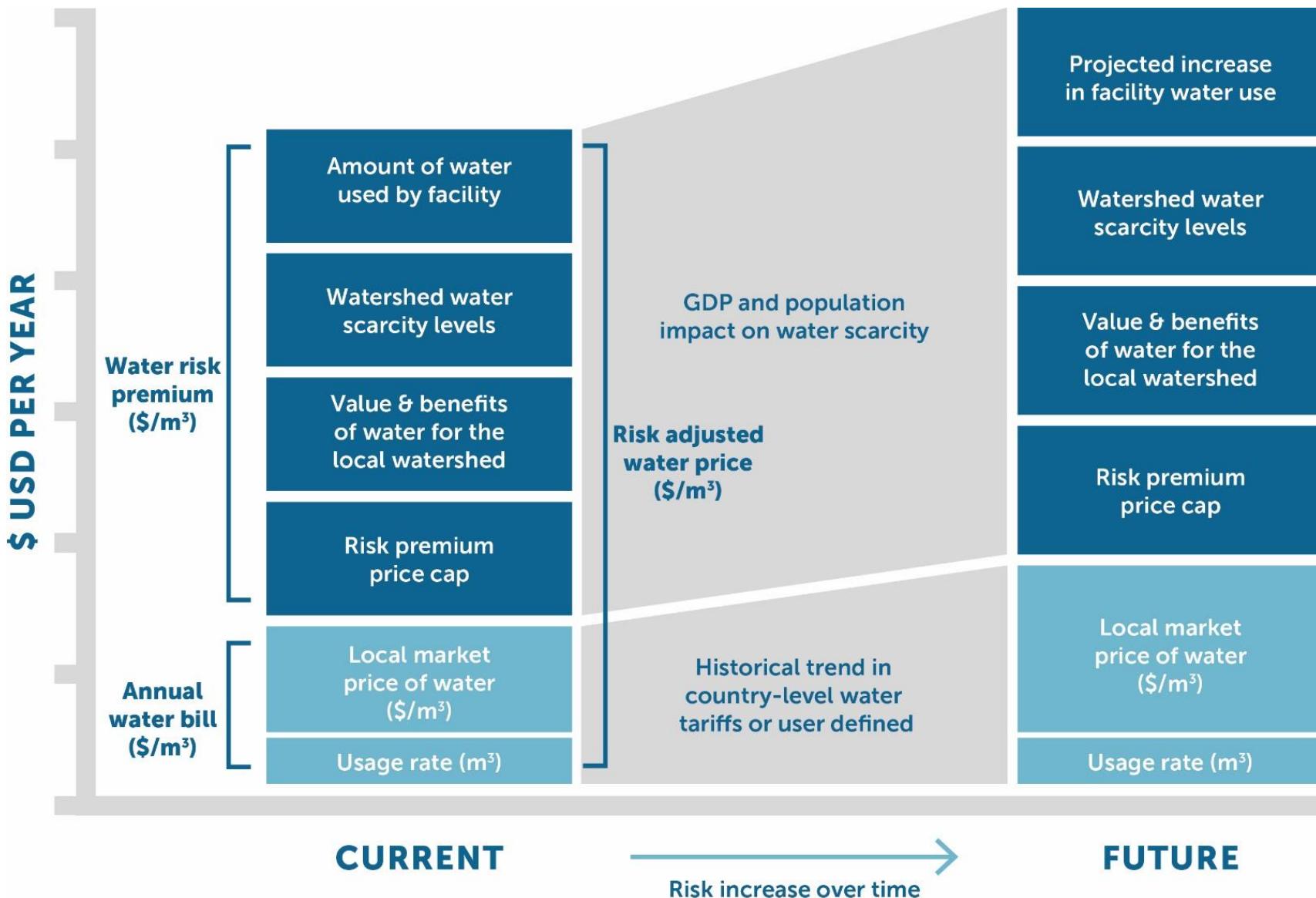
Despite these real and future risks, water is significantly undervalued in much of the world. The disconnect between market price and risk makes it hard to support optimal decisions regarding where to locate and expand operations or prioritize investment in water strategies.

WATER RISK MONETIZER METHODOLOGY

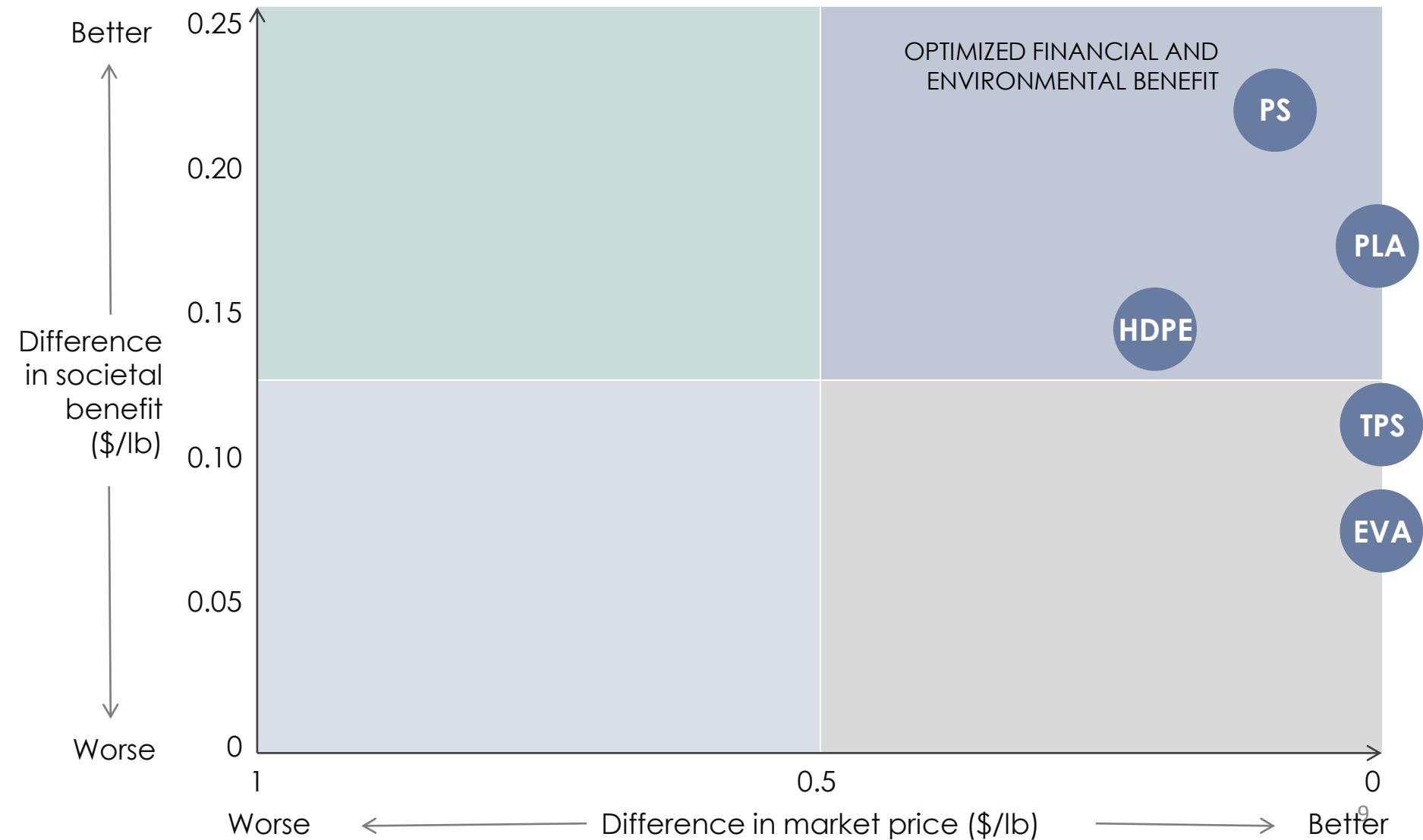
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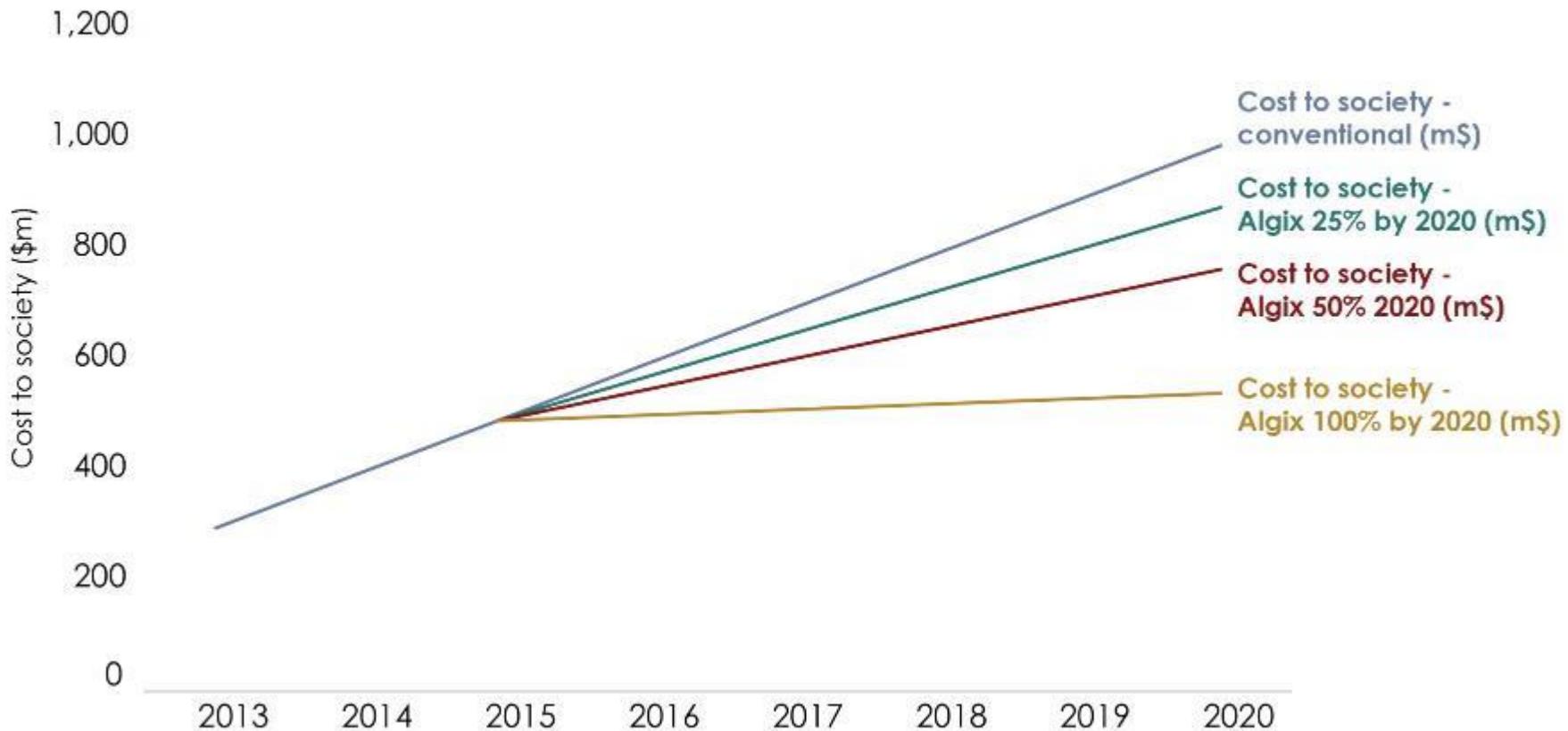
# FINANCIAL INFORMATION TO INFORM BUSINESS DECISIONS



## SOLAPLAST'S BENEFITS COMPARED TO CONVENTIONAL PLASTICS



## WHAT ARE THE ENVIRONMENTAL BENEFITS TO SOCIETY OF WIDESPREAD USE OF SOLAPLAST?



# THANK YOU



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