

Climate Risk, Resource Risk, and Financial Performance

5th Annual CSR Investing Summit

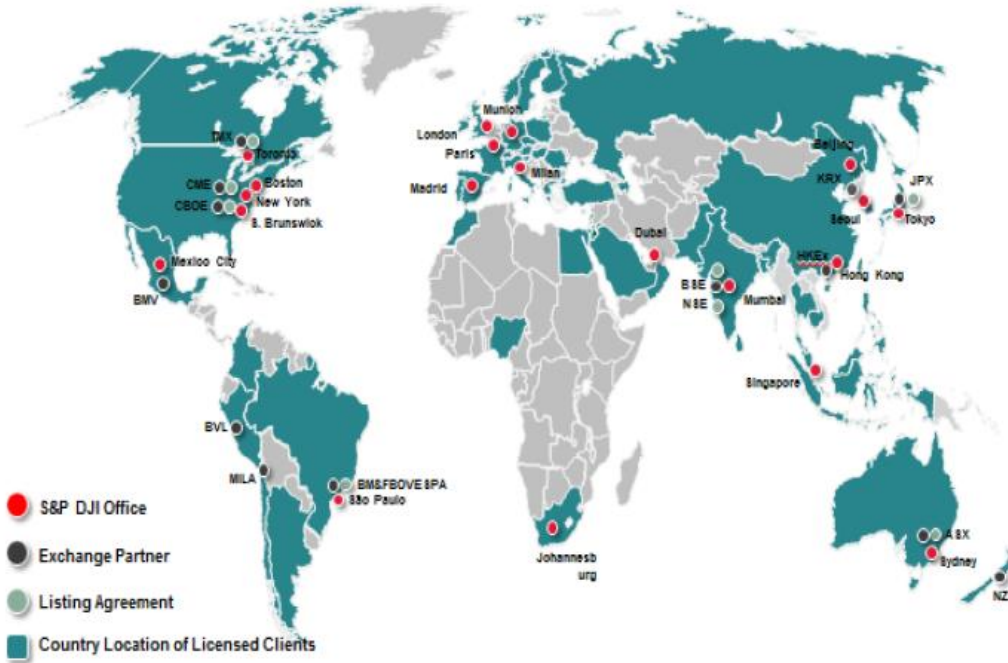
Libby Bernick
Global Head of Corporate Business
Trucost, part of S&P Dow Jones Indices

July 2017

**S&P Dow Jones
Indices**

A Division of **S&P Global**

Trucost is part of S&P Dow Jones Indices, a division of S&P Global



S&P Global

Sources:

* S&P Global, Investor Factbook 2015

**SustainAbility, 'Rate the Raters' Survey, 2012

Source: S&P Global. Permission to reprint or distribute any content from this presentation requires the written approval of S&P Dow Jones Indices. For illustrative purposes only.

S&P Dow Jones Indices

An S&P Global Division

S&P Global*

- **Global Reach:**
20,400 employees in 31 countries
- **Proven Success:**
US\$ 5.3 billion in revenue (12/2015)
(+5% Increase from 2014)

S&P DJI*

- **Trusted Brand:**
World's leading provider of financial market indices with 20 offices in 71 countries
- **Long-Term Track Record:**
 - More than 115 years of experience constructing indices
 - More than US\$ 3 trillion (6/2016) directly indexed to over 1,000,000 indices
 - US\$7.8 trillion of global assets benchmarked to the S&P 500 (12/2015)*
- **Sustainability Footprint:**
 - Over 150 indices dedicated to ESG, with 15+ years experience
 - Sustainability index pioneers (DJSI)**

Trucost ESG Solutions

Trucost provides sustainability data and insight to drive resilient, profitable business models and investment strategies – and identify transformative solutions of tomorrow



Investor
Portfolios & Bank
Loan books



New Business
Models



Corporate
supply chains



Commodities



Net benefit of
new products
or technologies

ESG analytics and data for footprinting, target setting, shadow pricing, scenario analysis, positive impact assessment

- **17 years** Trucost has been researching, standardizing and validating the world's most comprehensive natural capital data
- **93%** coverage of global equity markets by market cap.
- **10,000** companies and their supply chains researched annually by Trucost analysts
- **\$20 T** in investment funds analyzed

500+ environmental metrics in six major categories



Greenhouse
Gases



Air Pollutants



Water



Land and Water
Pollutants



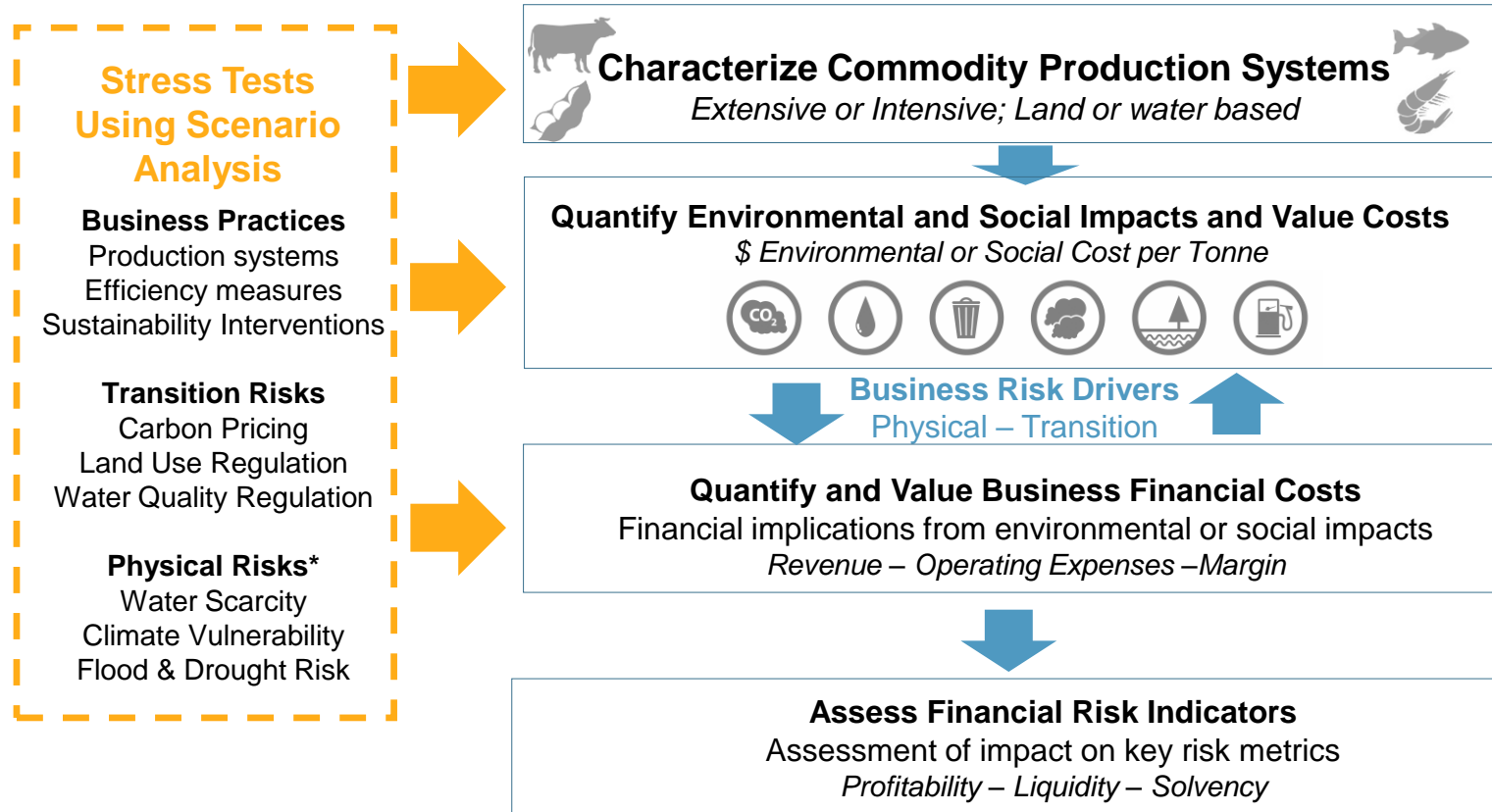
Waste



Natural Resource
Usage

Frameworks for Assessing ESG Financial Risks

Example of Trucost approach for assessing potential financial costs of environmental risks related to agricultural commodities



S&P Dow Jones Indices
ESG Analysis

Source: Trucost

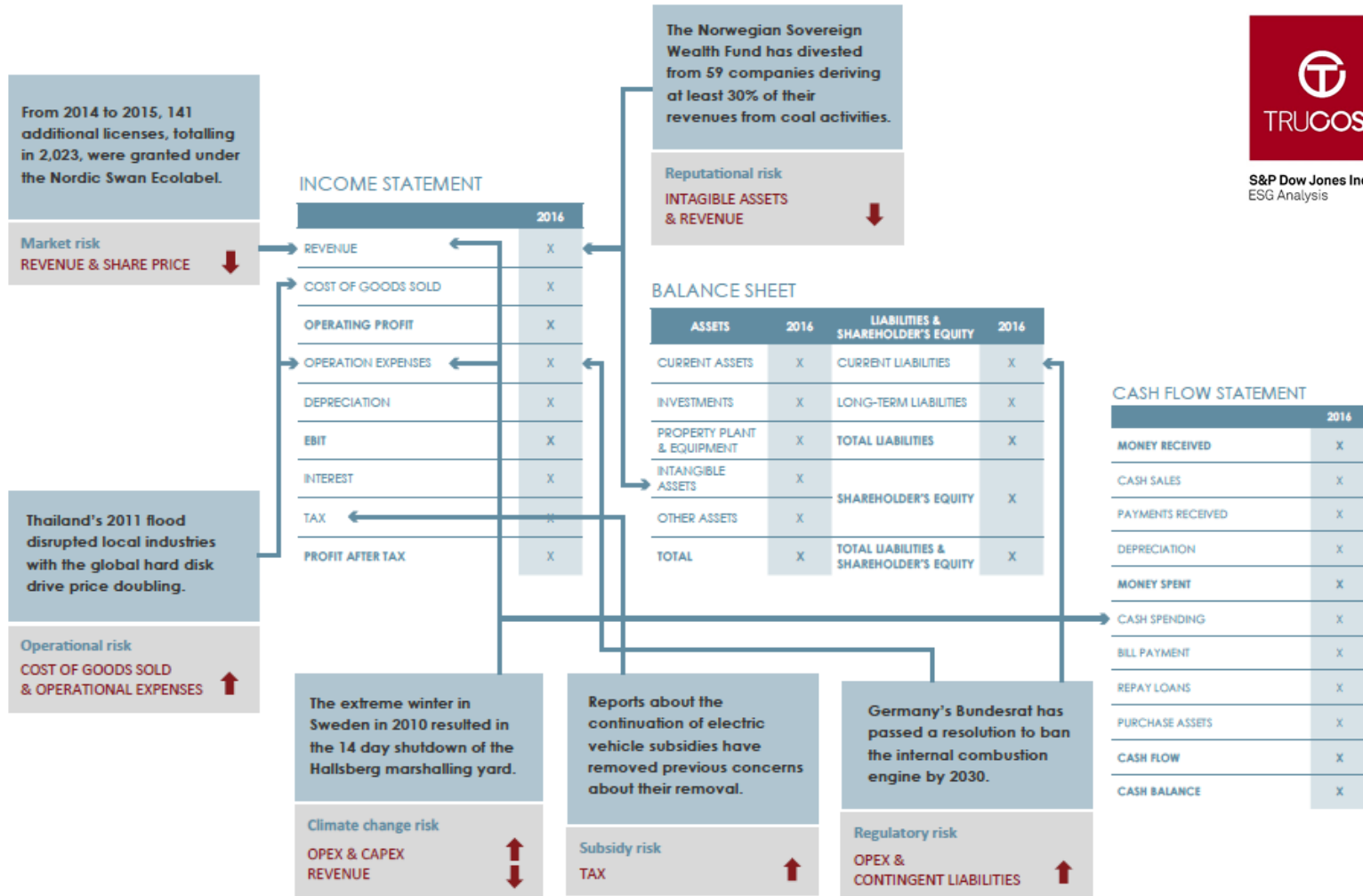
**S&P Dow Jones
Indices**

A Division of S&P Global

Translating ESG Issues into Financial Costs



S&P Dow Jones Indices
ESG Analysis



Source: Trucost Analysis, Norwegian State Ownership of Companies Climate Risk <https://www.trucost.com/publication/the-norwegian-states-direct-ownership-of-companies-climate-related-risks/>

S&P Dow Jones
Indices

A Division of S&P Global

Valuation of Water Scarcity and Quality Risks

Publicly available on-line tool for asset level valuation of potential revenue loss or increased operating costs from local water scarcity or quality



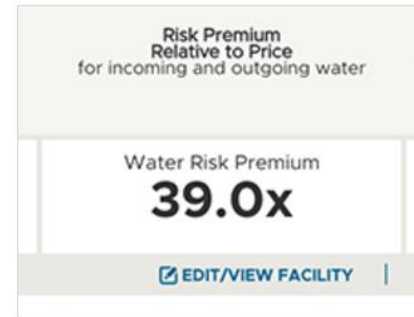
Inform

Corporate water strategies to mitigate risk and enable growth



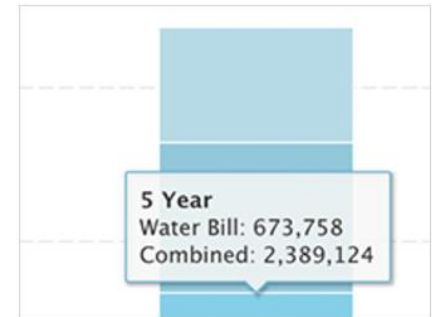
Assess

Water quantity and quality risks at a site and/or enterprise level



Quantify

Water risks in financial terms to understand the full value of water to our business



Calculate

Return on investment of different water management strategies and prioritize action

Source: Trucost analysis for Water Risk Monetizer

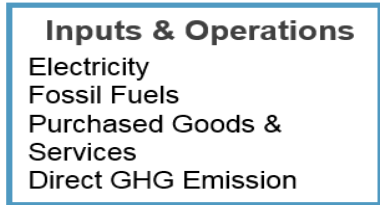
**S&P Dow Jones
Indices**

A Division of S&P Global

Trucost Internal Carbon Pricing Tool

Increasing Action on Climate Change
Carbon Taxes, Emissions Trading Schemes & Regulations

Direct Carbon Pricing Risk



Increasing Costs

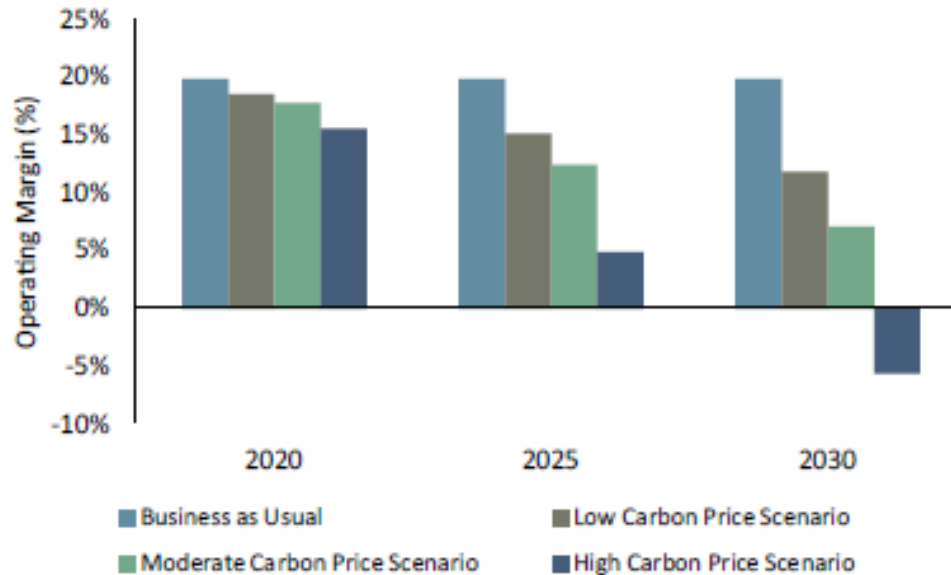
Company

Constrained Demand

Indirect Carbon Pricing Risk



S&P Dow Jones Indices
ESG Analysis



Source: Trucost Analysis

S&P Dow Jones
Indices

A Division of S&P Global

Thank you

Libby Bernick

Global Head of Corporate Business| Trucost

55 Water Street
New York, New York

T +1.484.685.6029
Libby.Bernick@spglobal.com



S&P Dow Jones Indices

A Division of **S&P Global**

DISCLAIMER

Copyright © 2017 S&P Trucost Limited. Redistribution or reproduction in whole or in part is prohibited without written permission.

This document does not constitute an offer of services in jurisdictions where Trucost and its affiliates do not have the necessary licenses. Trucost is not an investment advisor, and Trucost makes no representation regarding the advisability of investing in any company, security, investment fund or other investment vehicle. A decision to invest in any company, security, investment fund or other investment vehicle should not be made in reliance on any of the statements set forth in this document. Prospective investors are advised to make an investment in any company, security, fund or other vehicle only after carefully considering the risks associated with investing in such funds, as detailed in an offering memorandum or similar document that is prepared by or on behalf of the issuer of the investment fund or other investment product or vehicle.

The materials have been prepared solely for informational purposes only based upon information generally available to the public from sources believed to be reliable. No content contained in these materials (including credit-related analyses and data, research, valuation, models, software or other application or output therefrom) or any part thereof (“Content”) may be modified reverse-engineered, reproduced or distributed in any form or by any means, or stored in a database or retrieval system, without the prior written permission of Trucost. The Content shall not be used for any unlawful or unauthorized purposes. Trucost, its parent S&P Dow Jones Indices LLC and its third-party data providers and licensors (collectively the “Trucost Parties”) do not guarantee the accuracy, completeness, timeliness or availability of the Content. Trucost Parties are not responsible for any errors or omissions, regardless of the cause, for the results obtained from the use of the Content. THE CONTENT IS PROVIDED ON AN “AS IS” BASIS. TRUCOST PARTIES DISCLAIM ANY AND ALL EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE, FREEDOM FROM BUGS, SOFTWARE ERRORS OR DEFECTS, THAT THE CONTENT’S FUNCTIONING WILL BE UNINTERRUPTED OR THAT THE CONTENT WILL OPERATE WITH ANY SOFTWARE OR HARDWARE CONFIGURATION. In no event shall any of the Trucost Parties be liable to any party for any direct, indirect, incidental, exemplary, compensatory, punitive, special or consequential damages, costs, expenses, legal fees, or losses (including, without limitation, lost income or lost profits and opportunity costs) in connection with any use of the Content even if advised of the possibility of such damages.

The Content does not constitute or form part of any offer, invitation to sell, offer to subscribe for or to purchase any shares or other securities and must not be relied upon in connection with any contract relating to any such matter. ‘Trucost’ is the trading name of S&P Trucost Limited a limited company registered in England company number 3929223 whose registered office is at 20 Canada Square, London E14 5HL, UK.

S&P DOW JONES INDICES GENERAL DISCLAIMER

Copyright © 2017 S&P Dow Jones Indices LLC, a division of S&P Global. All rights reserved. STANDARD & POOR'S, S&P, S&P 500, S&P 500 LOW VOLATILITY INDEX, S&P 100, S&P COMPOSITE 1500, S&P MIDCAP 400, S&P SMALLCAP 600, S&P GIVI, GLOBAL TITANS, DIVIDEND ARISTOCRATS, S&P TARGET DATE INDICES, GICS, SPIVA, SPDR and INDEXOLOGY are registered trademarks of Standard & Poor's Financial Services LLC, a division of S&P Global ("S&P"). DOW JONES, DJ, DJIA and DOW JONES INDUSTRIAL AVERAGE are registered trademarks of Dow Jones Trademark Holdings LLC ("Dow Jones"). These trademarks together with others have been licensed to S&P Dow Jones Indices LLC. Redistribution or reproduction in whole or in part are prohibited without written permission of S&P Dow Jones Indices LLC. This document does not constitute an offer of services in jurisdictions where S&P Dow Jones Indices LLC, S&P, Dow Jones or their respective affiliates (collectively "S&P Dow Jones Indices") do not have the necessary licenses. Except for certain custom index calculation services, all information provided by S&P Dow Jones Indices is impersonal and not tailored to the needs of any person, entity or group of persons. S&P Dow Jones Indices receives compensation in connection with licensing its indices to third parties and providing custom calculation services. Past performance of an index is not an indication or guarantee of future results.

It is not possible to invest directly in an index. Exposure to an asset class represented by an index may be available through investable instruments based on that index. S&P Dow Jones Indices does not sponsor, endorse, sell, promote or manage any investment fund or other investment vehicle that is offered by third parties and that seeks to provide an investment return based on the performance of any index. S&P Dow Jones Indices makes no assurance that investment products based on the index will accurately track index performance or provide positive investment returns. S&P Dow Jones Indices LLC is not an investment advisor, and S&P Dow Jones Indices makes no representation regarding the advisability of investing in any such investment fund or other investment vehicle. A decision to invest in any such investment fund or other investment vehicle should not be made in reliance on any of the statements set forth in this document. Prospective investors are advised to make an investment in any such fund or other vehicle only after carefully considering the risks associated with investing in such funds, as detailed in an offering memorandum or similar document that is prepared by or on behalf of the issuer of the investment fund or other investment product or vehicle. S&P Dow Jones Indices LLC is not a tax advisor. A tax advisor should be consulted to evaluate the impact of any tax-exempt securities on portfolios and the tax consequences of making any particular investment decision. Inclusion of a security within an index is not a recommendation by S&P Dow Jones Indices to buy, sell, or hold such security, nor is it considered to be investment advice. Closing prices for S&P Dow Jones Indices' US benchmark indices are calculated by S&P Dow Jones Indices based on the closing price of the individual constituents of the index as set by their primary exchange. Closing prices are received by S&P Dow Jones Indices from one of its third party vendors and verified by comparing them with prices from an alternative vendor. The vendors receive the closing price from the primary exchanges. Real-time intraday prices are calculated similarly without a second verification].

These materials have been prepared solely for informational purposes based upon information generally available to the public and from sources believed to be reliable. No content contained in these materials (including index data, ratings, credit-related analyses and data, research, valuations, model, software or other application or output therefrom) or any part thereof (“Content”) may be modified, reverse-engineered, reproduced or distributed in any form or by any means, or stored in a database or retrieval system, without the prior written permission of S&P Dow Jones Indices. The Content shall not be used for any unlawful or unauthorized purposes. S&P Dow Jones Indices and its third-party data providers and licensors (collectively “S&P Dow Jones Indices Parties”) do not guarantee the accuracy, completeness, timeliness or availability of the Content. S&P Dow Jones Indices Parties are not responsible for any errors or omissions, regardless of the cause, for the results obtained from the use of the Content. THE CONTENT IS PROVIDED ON AN “AS IS” BASIS. S&P DOW JONES INDICES PARTIES DISCLAIM ANY AND ALL EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE, FREEDOM FROM BUGS, SOFTWARE ERRORS OR DEFECTS, THAT THE CONTENT’S FUNCTIONING WILL BE UNINTERRUPTED OR THAT THE CONTENT WILL OPERATE WITH ANY SOFTWARE OR HARDWARE CONFIGURATION. In no event shall S&P Dow Jones Indices Parties be liable to any party for any direct, indirect, incidental, exemplary, compensatory, punitive, special or consequential damages, costs, expenses, legal fees, or losses (including, without limitation, lost income or lost profits and opportunity costs) in connection with any use of the Content even if advised of the possibility of such damages.

S&P Global keeps certain activities of its various divisions and business units separate from each other in order to preserve the independence and objectivity of their respective activities. As a result, certain divisions and business units of S&P Global may have information that is not available to other business units. S&P Global has established policies and procedures to maintain the confidentiality of certain non-public information received in connection with each analytical process.

In addition, S&P Dow Jones Indices provides a wide range of services to, or relating to, many organizations, including issuers of securities, investment advisers, broker-dealers, investment banks, other financial institutions and financial intermediaries, and accordingly may receive fees or other economic benefits from those organizations, including organizations whose securities or services they may recommend, rate, include in model portfolios, evaluate or otherwise address.