

## Moving Towards AI @ Shell

Spark + AI Summit Europe 2018

Dan Jeavons – General Manager Data  
Science

# Definitions & cautionary note

The companies in which Royal Dutch Shell plc directly and indirectly owns investments are separate legal entities. In this presentation "Shell", "Shell group" and "Royal Dutch Shell" are sometimes used for convenience where references are made to Royal Dutch Shell plc and its subsidiaries in general. Likewise, the words "we", "us" and "our" are also used to refer to Royal Dutch Shell plc and its subsidiaries in general or to those who work for them. These terms are also used where no useful purpose is served by identifying the particular entity or entities. "Subsidiaries", "Shell subsidiaries" and "Shell companies" as used in this presentation refer to entities over which Royal Dutch Shell plc either directly or indirectly has control. Entities and unincorporated arrangements over which Shell has joint control are generally referred to as "joint ventures" and "joint operations", respectively. Entities over which Shell has significant influence but neither control nor joint control are referred to as "associates". The term "Shell interest" is used for convenience to indicate the direct and/or indirect ownership interest held by Shell in an entity or unincorporated joint arrangement, after exclusion of all third-party interest.

This presentation contains forward-looking statements (within the meaning of the U.S. Private Securities Litigation Reform Act of 1995) concerning the financial condition, results of operations and businesses of Royal Dutch Shell. All statements other than statements of historical fact are, or may be deemed to be, forward-looking statements. Forward-looking statements are statements of future expectations that are based on management's current expectations and assumptions and involve known and unknown risks and uncertainties that could cause actual results, performance or events to differ materially from those expressed or implied in these statements. Forward-looking statements include, among other things, statements concerning the potential exposure of Royal Dutch Shell to market risks and statements expressing management's expectations, beliefs, estimates, forecasts, projections and assumptions. These forward-looking statements are identified by their use of terms and phrases such as "aim", "ambition", "anticipate", "believe", "could", "estimate", "expect", "goals", "intend", "may", "objectives", "outlook", "plan", "probably", "project", "risks", "schedule", "seek", "should", "target", "will" and similar terms and phrases. There are a number of factors that could affect the future operations of Royal Dutch Shell and could cause those results to differ materially from those expressed in the forward-looking statements included in this presentation, including (without limitation): (a) price fluctuations in crude oil and natural gas; (b) changes in demand for Shell's products; (c) currency fluctuations; (d) drilling and production results; (e) reserves estimates; (f) loss of market share and industry competition; (g) environmental and physical risks; (h) risks associated with the identification of suitable potential acquisition properties and targets, and successful negotiation and completion of such transactions; (i) the risk of doing business in developing countries and countries subject to international sanctions; (j) legislative, fiscal and regulatory developments including regulatory measures addressing climate change; (k) economic and financial market conditions in various countries and regions; (l) political risks, including the risks of expropriation and renegotiation of the terms of contracts with governmental entities, delays or advancements in the approval of projects and delays in the reimbursement for shared costs; and (m) changes in trading conditions. No assurance is provided that future dividend payments will match or exceed previous dividend payments. All forward-looking statements contained in this presentation are expressly qualified in their entirety by the cautionary statements contained or referred to in this section. Readers should not place undue reliance on forward-looking statements. Additional risk factors that may affect future results are contained in Royal Dutch Shell's Form 20-F for the year ended December 31, 2017 (available at [www.shell.com/investor](http://www.shell.com/investor) and [www.sec.gov](http://www.sec.gov)). These risk factors also expressly qualify all forward-looking statements contained in this presentation and should be considered by the reader. Each forward-looking statement speaks only as of the date of this presentation, 03/10/18. Neither Royal Dutch Shell plc nor any of its subsidiaries undertake any obligation to publicly update or revise any forward-looking statement as a result of new information, future events or other information. In light of these risks, results could differ materially from those stated, implied or inferred from the forward-looking statements contained in this presentation.

We may have used certain terms, such as resources, in this presentation that the United States Securities and Exchange Commission (SEC) strictly prohibits us from including in our filings with the SEC. U.S. Investors are urged to consider closely the disclosure in our Form 20-F, File No 1-32575, available on the SEC website [www.sec.gov](http://www.sec.gov).  
Copyright of Shell International



# Digitalisation has a role in tackling climate change

## ENERGY

Digital technologies can enable the integration of renewables onto the grid, improve efficiency and heighten transparency.

## HEALTH

Digital technologies will put "a doctor in your pocket," allowing users to manage their own health via their smart device.

## BUILDINGS

Digital technologies will increase comfort and reduce energy and water bills.

## WORK & BUSINESS

Digital technologies enable telecommuting, virtual conferencing and save employees time and money.

## FOOD

Digital technologies can help raise productivity and reduce food waste onto the grid, improve efficiency and heighten transparency.

## LEARNING

Digital technologies can make education accessible, engaging, flexible and affordable.

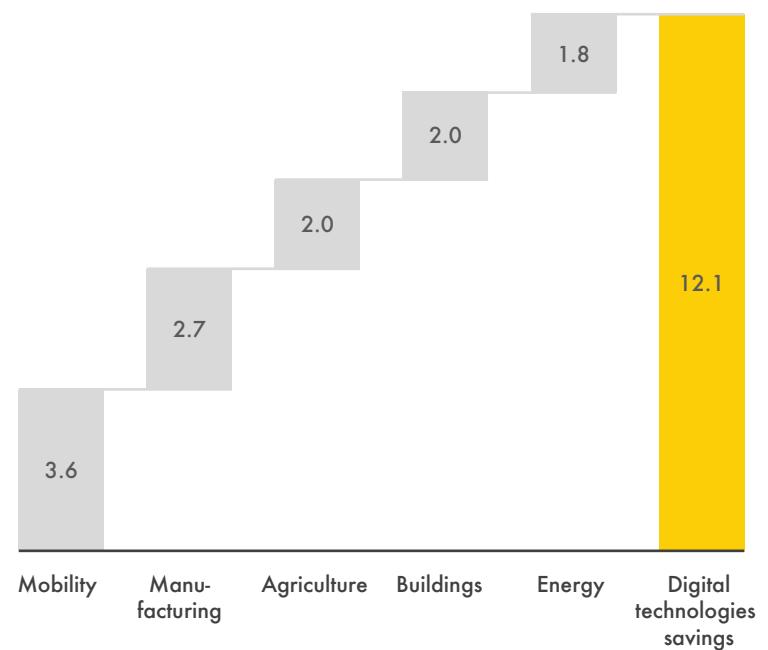
## MOBILITY & LOGISTICS

Digital technologies can help everyone reach their destinations faster, cheaper and safer.

## MANUFACTURING

Digital technologies will place the customer at the center of a user focused service, cutting resource inputs at the same time.

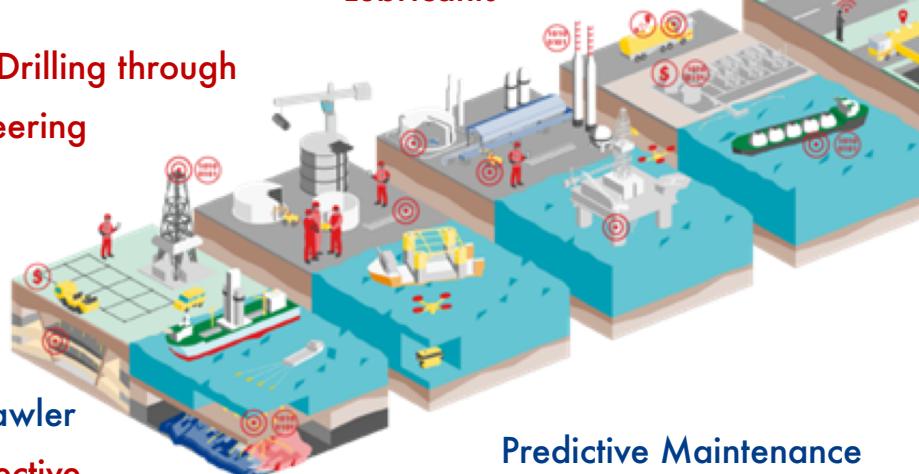
mtCO<sub>2</sub>e abatement potential by sector (2030)



Global e sustainability initiative Smarter 2030 report

# Opportunities

**GeoDesic**  
Optimized Well Drilling through  
improved Geosteering



**GeoCrawler & SaltCrawler**  
More efficient and effective  
Subsurface Interpretation

**Predictive Maintenance**  
Predicting anomalies in critical equipment  
like compressors and valves

**Video Analytics for Retail**  
**Alerting Retail Station Service**  
**Champions to Unsafe Behaviour**



**Reward Engine (LION)**  
Providing improved customer  
insights to tailor offers

Global Commercial Lead Identification  
Identifying potential leads for B2B  
lubricants customers

# The Intelligent Cloud & Intelligent Edge



# Developing a Cultural Shift for AI Adoption



## Building Momentum

**2,000+**

Members of the Analytics Network

**120+**

Data Science Professionals in the Digital CoE

**550+ Users of Digital Lab**

Our standard workbench for Data Scientists,

**100+**

Data Science projects in flight across Shell. Projects in every major business and function

**15**

Digital Accelerator Projects Selected by the Executive Committee

**40+**

Network events in 2018

**7+**

Hackathon Events in 2018



**http://www.shell.ai**  
Making Energy Smarter

