1. Ladies and Gentlemen. Good afternoon!

2. It is great to be at this year’s WPC and I’m delighted to be speaking to you at this important industry event.
3. Before I focus on Shell’s strategies, let’s first consider the wider industry environment we all operate in.

4. A growing global population, urbanisation and a pressing need to help raise the living standards of hundreds of millions of people across the planet mean that demand for energy will continue to grow.

5. Shell believes that by 2050, global energy demand will double from levels at the start of the century. And, due to the need to tackle climate change, society needs to find ways to meet that surge in demand effectively, while emitting less carbon.

6. Renewable energy technologies have an indispensable role to play in enabling a cleaner energy future, but they are going to need some help along the way.

7. The outlook is uncertain, but scenarios show that more gas and less oil will be used in the global energy mix in the future.
8. For our industry, the first thing to remember is that petrochemicals are fundamental to growth in all economies.

9. Most of us in this room are surrounded by products made with petrochemicals, and have been for most of our lives – including the speakers around you, the screens in front of you, and the seats beneath you.

10. And, thanks to sustained economic growth, many millions of people who haven’t had much access to these products increasingly want more of them.

11. Despite uncertainties about the world economy and energy prices, we expect to see sustained long-term growth in the global chemical industry.

12. We see demand for chemical products growing in line with, or above, overall GDP for the next 20 years.

13. Part of this demand growth will come from increased pull from consumers and societies for lower-carbon and sustainable solutions.
14. Chemicals play a key part in the response. Take the Solar Impulse, for example, a plane that successfully flew around the world on solar power. You may ask, why is that relevant to our industry? More than 90% of the aircraft’s structure is made from chemical technology such as lightweight plastics that replace metals.

15. Whether it is with lighter materials or better lubricants for improved vehicle fuel efficiency, insulation for energy conservation in buildings or smart packaging for food, chemical products can help reduce emissions, energy use, water consumption and waste.

16. An illustration is polyurethane building insulation. Tough and lightweight, it is more energy efficient than older insulation materials like rock wool.

17. Another example is lightweight plastics, which contribute to improved fuel efficiency of cars, trucks and planes, among others.

18. And modern petrochemicals are components of energy-efficient lighting, low-temperature detergents, and even wind turbines and solar panels.

19. This highlights the opportunity our industry has in serving future growth.
20. As an integrated energy company, the energy transition poses questions about where Shell should participate in the energy system of the future.

21. Petrochemicals will play an important role in tackling some of the global challenges ahead.

22. As part of Shell’s refreshed strategy, Chemicals became one of the company's areas for major growth.

23. We draw strength from being part of an integrated energy company, with shared infrastructure and access to a variety of feedstocks, alongside extensive processing, trading and marketing expertise.

24. We are proud of Shell’s brand and what it represents for hundreds of millions of consumers around the world.

25. Shell Chemicals strategy seeks to link investment to Shell’s competitive advantage, along with advanced technology, portfolio robustness, and diversity of product market exposures.

26. We do not believe investment in undifferentiated positions will be rewarded in the long term.

27. In 2017, Shell Chemicals saw a record year for earnings and our aspiration is to double our earnings by the mid-'20s.
28. We believe there are five key factors – on top of driving operational excellence - for competing successfully in today’s petrochemicals market:

- First – low capital and construction costs;
- second – access to low-cost feedstock and energy;
- third – large-scale and effective hydrocarbon integration;
- fourth – advanced and advantaged technologies;
- and finally – good access to markets and customers.

29. The key is to create opportunities and partnerships that can achieve as many of these competitive advantages as possible.

30. However, there is one universal imperative for all stages of all projects – maintain the highest standards of safety.

31. We are proud to be at the forefront of developing advanced chemical facilities around the world – such as our PennChem project in Pennsylvania USA, our contribution to the joint venture expansion of the Nanhai plant in China, and the A04 project at our Geismar chemical plant in Louisiana. These are projects with a competitive edge, underpinned by some of these key competitive success factors I was referring to.

32. Our advanced technology has played an important role in delivering solid financial performance for Shell’s Chemicals business.

- SMPO (20-30% higher energy efficiency)
- OMEGA (99% conversion efficiency vs 90%, 20% less steam, 30% less wastewater)
- Advanced Higher Olefins Process
- Next generation processes - DPC (500-tonne per year demo unit in Singapore)

33. We have long been pioneers in more efficient process technologies and catalysts, and will continue that development.
WORKING WITH PARTNERS

34. At Shell, we prioritize developing partnerships. Throughout our history, we have seen how strong partnerships with governments, joint ventures, suppliers or customers are the bedrock of successful projects.

35. We bring a compelling proposition – with our expertise, technology and network; and the ability to execute mega projects. We combine our strengths with the resources and capabilities of our partners, and build long-term value together.

36. Working in strong partnerships also drives technology innovation – which is increasingly collaborative across companies and universities.

37. We rely on our customers, and our customers’ customers, to transform our molecules and move them down the value chain. This is why we focus our commercial strategy on building strong and long-lasting relationships with our customers, leveraging our strengths and investing together in robust and integrated supply chains.

38. Ladies and gentlemen, the world around us is always changing and so is the energy system. While we cannot predict future trends, Shell is responding to the changing environment, how we tackle the energy and climate challenges, and how we refresh our Chemicals portfolio.

39. The chemical industry’s growth story at a global level will continue. At Shell, we will continue investing in our existing assets, to increase their capacity and efficiency. And we will pursue options to invest in building new large-scale facilities to capitalise on our expertise in technology and building mega projects.

40. Through strong partnerships with other companies, customers, and resource holders, together we can help global society become more prosperous in more sustainable ways.

41. Thank you.