

## ADDRESS

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On behalf of the Permanent Council and Executive Board, it gives me great pleasure to welcome all participants to the Fourteenth World Petroleum Congress. It is a special honour to have His Majesty King Harald V of Norway, Royal Patron of this Congress, present this morning to participate in these opening ceremonies. We are most grateful for your presence, sir, and very much look forward to your remarks.

It is most fitting that the Permanent Council chose Norway for the venue of this gathering. The Norwegian continental shelf operations have not only made Norway into a major oil producer but have taught our industry many valuable lessons in deep water well completions and in the production of petroleum under the harshest offshore conditions. It is appropriately here, in Stavanger, the Norwegian oil capital, that we are privileged to learn of the latest advances in petroleum production technology, which have their roots in the close by North Sea.

At the outset of this meeting I would like to express our appreciation to our Norwegian hosts for their untiring efforts to make this Congress a success. Ladies and gentlemen, please join me in applauding Mr. Harald Norvik, President and CEO of Statoil, and his wonderful colleagues, for their diligent efforts and the excellent arrangements we are enjoying in Stavanger....

Our very special thanks also to Lord Mayor Leif Måsver and the citizens of Stavanger for their wonderful preparations for our visit and their very special, and I may say world famous, hospitality....

There is another reason why I am particularly pleased to have this Congress in Norway. The theme of the Fourteenth Congress is 'Petroleum in a World of Sustainable Growth'. One person is preeminent in focusing our attention on the need to strike a productive balance between the demand for energy to sustain global economic growth and well being on one hand, and the challenge of preserving and protecting our environment, on the other. This of course is Mrs. Gro Harlem Brundtland, Prime Minister of

Norway and Chair of the United Nations Commission on Environment and Development. The Brundtland Report of 1987 challenged us to address the need to achieve a sustainable world economy, where the needs of all the world's peoples are met without compromising future generations. We are indeed privileged to hear from Mrs. Brundtland as she keynotes this Congress as the opening plenary speaker tomorrow morning, and we are greatly honoured to have her in our midst at this opening event.

Let me briefly dwell on the theme of this Congress, and anticipate the impact on the petroleum industry as the world aspires to achieve economic growth in an environmentally sustainable way.

The close linkage of energy consumption, 80% of which is fossil fuel based today, and economic activity, is widely recognized. Various forecasts foretell a doubling to tripling of the world's economic activity in the next fifty years. This is driven by a projected near doubling of the world's population in this time frame, coupled with the necessary economic betterment of the world's developing areas, as well as a likely further expansion of already developed economies. Even as we accept the most aggressive energy conservation scenarios, these projections still lead to a near tripling of world energy consumption in the next fifty years, and a two-and-one-half fold increase in fossil fuel consumption. Fossil fuels, and specifically petroleum, will certainly continue to dominate the energy mix in this time span.

This growth extrapolation will likely be accompanied by continuing urbanization of the world's population in metropolises of unprecedented size, complexity, and population density.

The impact of this growth development on our environment could easily be severe, particularly as concerns urban air quality, if technological and social actions are not accelerated now, to manage our affairs diligently. So much has already been achieved by this industry to meet mounting public concern regarding environmental issues. But it seems that we are only at the threshold of circumstances

that could easily overwhelm us, if we do not address this continuing and growing challenge in a timely and aggressive manner.

Ladies and gentlemen, whither petroleum in a world of sustainable growth? That is the question. It is my hope that as we reason together in the next three days that we will examine all aspects of the expected drastically increasing future environmental impacts of energy production, conversion, transportation and use.

Let us examine with care the impact of future growth scenarios on new technology development, on industry structure, the impact on financial

markets and market conditions in general. Let us each, in our organizations, regions, or nations develop Research and Development policy which squarely meets the need of these issues. Let us in the spirit of international cooperation exchange such policies, harmonize them, and work closely with each other.

The problems before us are sizeable. But so are our talents and determination. Let us deal with the question of sustainable economic growth with care in our three days' deliberations in Stavanger.

Thank you