

Title	Report 288: Flaring & venting in the oil & gas exploration & production industry																						
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Executive Summary	<p>The option to release gas to the atmosphere by flaring and venting is an essential practice in oil and gas production, primarily for safety reasons. Flaring is the controlled burning of natural gas produced in association with oil in the course of routine oil and gas production operations. Venting is the controlled release of unburned gases directly into the atmosphere. The availability of a flare or a vent ensures that associated natural gas can be safely disposed of in emergency and shutdown situations. Where gas cannot be stored or used commercially, the risk of fire and explosion must be reduced by either flaring or venting.</p> <p>It is in an oil company's interest to minimise the amount of gas flared in order to realise as much value as possible from the hydrocarbons being produced. A variety of mechanisms may potentially be used to minimise flaring. However, it may not be technically or economically feasible to sell some or all of the gas, for reasons that are often a combination of geography, availability of customers, and government energy policies. Similarly, it may not be technically or economically feasible to re-inject the gas into underground reservoirs. Therefore, gas may have to be flared as a waste product. In some cases, venting may be preferable to flaring, depending on considerations such as local noise impacts, toxicity of gases being produced, and hydrocarbon content of the gas.</p> <p>For environmental and resource conservation reasons, flaring and venting should always be minimised as much as practicable, consistent with safety considerations. Flaring and venting can have local environmental impacts, as well as producing emissions which have the potential to contribute to global warming. Available data indicate that, on a worldwide basis, gas flaring contributes only 1% of anthropogenic carbon dioxide emissions, and flaring and venting contribute only 4% of anthropogenic methane emissions. Case studies in this booklet illustrate some of the ways in which the industry has sought to reduce flaring and/or minimise its impacts through commercialisation of gas reserves, improvements in operation, maintenance and design of flare systems, and new ways of storing associated gas.</p> <p>Despite these developments, the essential point is that no single approach to dealing with associated gas will be appropriate for all projects or locations. Industry needs to be able to choose from among a variety of creative and common sense approaches to address flaring and venting concerns in specific operations. To achieve this, governments need to provide an energy policy framework which will encourage and allow companies to select from among very different approaches in order to achieve the best practicable outcome in particular circumstances.</p>																						
Table of Contents	<table> <tr> <td>Executive summary</td> <td>ii</td> </tr> <tr> <td>1. Introduction</td> <td>1</td> </tr> <tr> <td>2. What is flaring?</td> <td>1</td> </tr> <tr> <td>3. What is venting?</td> <td>2</td> </tr> <tr> <td>4. Safety aspects</td> <td>3</td> </tr> <tr> <td>5. Environmental issues</td> <td>3</td> </tr> <tr> <td> 5.1 Measuring quantities of gas flared or vented</td> <td>4</td> </tr> <tr> <td> 5.2 Carbon dioxide emissions from flaring</td> <td>5</td> </tr> <tr> <td> 5.3 Methane emissions from flaring and venting</td> <td>5</td> </tr> <tr> <td>6. Resource conservation</td> <td>6</td> </tr> <tr> <td>7. Conclusions</td> <td>7</td> </tr> </table>	Executive summary	ii	1. Introduction	1	2. What is flaring?	1	3. What is venting?	2	4. Safety aspects	3	5. Environmental issues	3	5.1 Measuring quantities of gas flared or vented	4	5.2 Carbon dioxide emissions from flaring	5	5.3 Methane emissions from flaring and venting	5	6. Resource conservation	6	7. Conclusions	7
Executive summary	ii																						
1. Introduction	1																						
2. What is flaring?	1																						
3. What is venting?	2																						
4. Safety aspects	3																						
5. Environmental issues	3																						
5.1 Measuring quantities of gas flared or vented	4																						
5.2 Carbon dioxide emissions from flaring	5																						
5.3 Methane emissions from flaring and venting	5																						
6. Resource conservation	6																						
7. Conclusions	7																						

	Appendices	
	A. Case studies	8
	Case study 1: The role of market forces - flaring and the Nigerian oil industry	8
	Case study 2: Research and development into carbon dioxide storage - the Sleipner CO2 Project	8
	Case study 3: Technical innovations in flare design - the Gullfaks Project	9
	Case study 4: Local factors influence flare design in Venezuela	9
	B. References	10