

# **Leak Detection Market for Oil & Gas with COVID-19 Impact by Technology (Acoustic, E-RTTM, Fiber Optic, Mass/Volume Balance, Laser Absorption and LiDAR, Thermal Imaging), Medium (Oil and Condensate, Natural Gas), and Region - Global Forecast to 2025**

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## **Abstracts**

The Leak detection market for oil & gas is valued at USD 2.1 billion in 2020 and is projected to reach USD 3.0 billion by 2025; it is expected to grow at a CAGR of 7.8% from 2020 to 2025. Several projects pertaining to the oil and gas pipelines have been undertaken globally, and a significant number of projects are being planned owing to the increasing consumption of oil and gas worldwide. Thus, operators across the world are expanding their existing pipeline networks, as well as constructing new pipelines to meet the increasing demand for natural gas and oil.

Retrofitting complications related to some leak detection systems are expected to restrain the growth of the market. Moreover, the lack of efficient leak detection systems that provide information related to different parameters of leakages and the decrease in global oil prices are expected to be prime challenges for the market players.

Oil is physically traded in different grades. The most popular traded grades are Brent North Sea Crude (commonly known as Brent crude) and West Texas Intermediate (commonly known as WTI). With the spread of the COVID-19 globally, the supply of fuel has exceeded its demand by a significant margin worldwide. A decrease in oil prices has affected the global oil and gas industry significantly. It also affected the financial position of leading oil and gas companies, as well as caused delays in upcoming and ongoing projects. For instance, in April 2020, the Energy Ministry of Argentina suspended auctioning of projects for the development of the Vaca Muerta–Buenos Aires natural gas pipeline owing to the worsening economic scenario of the country resulting

from the pandemic. However, with an increase in the prices of oil, the oil and gas market is expected to recover by 2021–2022.

“E-RTTM technology: The fastest technology segment of leak detection market for oil & gas .”

E-RTTM refers to an extended real-time transient model. It is used for detecting leakages and identifying their location. The advantages of E-RTTM technology-based leak detection systems over systems based on other technologies are that these systems can detect small leakages, identify the size of the leakages accurately, and model all dynamic fluid characteristics (flow, pressure, and temperature). These systems consider the extensive configuration of physical pipeline characteristics (length, diameter, thickness, etc.), as well as product characteristics (density, viscosity, etc.). Hence, they provide highly accurate results regarding leak locations in less time.

“Natural Gas: The leading segment of the leak detection market for oil & gas .”

There has been a significant increase in the consumption of natural gas in recent years. The presence of abundant natural gas resources and its increased production make it a competitive energy resource. Natural gas remains a key fuel in the electric power generation and the industrial sectors. In the electric power generation sector, natural gas is a preferred choice owing to its fuel efficiency. It also burns cleaner than coal or petroleum products. As governments of different countries are implementing national or regional plans to reduce carbon dioxide emissions, they are expected to encourage the use of natural gas more than carbon-intensive coal and liquid fuels. Therefore, the reliability and security of gas transportation infrastructures are of high priority in the energy sector. Leak detection systems carry out timely detection of those parts of gas infrastructures that are prone to leakages. These systems generate quick responses to stop the gas discharge and ensure proper pipeline maintenance. Some of the important leak detection technologies used for the detection of natural gas leakages are thermal imaging, RTTM or E-RTTM, and acoustic.

“North America: The leading region in the global leak detection market for oil & gas .”

North America is projected to account for the largest size of the leak detection market for oil & gas from 2020 to 2025. The US government provides significant subsidies to petroleum companies in the form of tax exemptions at virtually every stage of the oil exploration and extraction process, right from the leasing of oil fields to drilling equipment. The government support for the growth of the oil and gas industry in the US

is one of the primary reasons for the rising number of oil and gas projects in the country. This, in turn, is expected to contribute to the growth in demand for leak detection technologies and systems in the US. Moreover, according to the Pipeline and Hazardous Materials Safety Administration (PHMSA), an agency of the US Department of Transportation, the increasing incidents of leakages in the oil and gas pipelines and storage tanks at production facilities also fuel the growth of the leak detection market for oil & gas in North America.

The study contains insights from various industry experts, ranging from component suppliers to Tier 1 companies and OEMs. The break-up of the primaries is as follows:

By Company Type: Tier 1 – 40%, Tier 2 – 25%, and Tier 3 – 35%

By Designation: C-level Executives – 35%, Directors – 28%, and Others – 37%

By Region: North America – 47%, Europe – 20%, APAC – 18%, South and Central America – 10%, and Middle East and Africa – 5%

Honeywell International Inc. (US), Emerson Electric Co. (US), ABB (Switzerland), KROHNE Group (Germany), PSI Software AG (Germany), Atmos (UK), AVEVA (UK), FLIR Systems Inc. (US), HIMA (Germany), Yokogawa Electric Corporation (Japan), Asel-Tech (Brazil), Bridger Photonics (US), Flyscan Systems Inc. (Canada), Fotech Group Ltd. (UK), Hawk Measurement Systems (Australia), MAGNUM (Germany), MSA Safety (US), OptaSense Ltd. (UK), Simulation Software Ltd. (UK), and TTK (France) are some of the key players operating in the leak detection market for oil & gas.

#### Research Coverage:

The report segments the leak detection market for oil & gas and forecasts its size, by value, based on Technology (acoustic/ultrasonic, extended real-time transient model (E-RTTM), fiber optic, mass/volume balance, vapor sensing, thermal imaging, and laser absorption and LiDAR), Medium (Oil and Condensate and Natural Gas), Location (Onshore and Offshore) and Region (North America, Europe, Asia Pacific, South and Central America, Middle East and Africa),.

The report also provides a comprehensive review of market drivers, restraints, opportunities, and challenges in the leak detection market for oil & gas. The report also covers qualitative aspects in addition to the quantitative aspects of these markets.

## Key Benefits of Buying the Report

The report will help the leaders/new entrants in this market with information on the closest approximations of the revenue numbers for the overall market and the sub-segments. This report will help stakeholders and gain more insights to better position their businesses and plan suitable go-to-market strategies. The report also helps stakeholders understand the pulse of the leak detection market for oil & gas and provides them information on key market drivers, restraints, challenges, and opportunities. Report also covers COVID-19 impact on leak detection market for oil & gas .

## Contents

### 1 INTRODUCTION

- 1.1 STUDY OBJECTIVES
- 1.2 DEFINITION
- 1.3 STUDY SCOPE
  - 1.3.1 MARKETS COVERED
  - 1.3.2 GEOGRAPHIC SCOPE
- 1.4 INCLUSIONS AND EXCLUSIONS
- 1.5 YEARS CONSIDERED
- 1.6 CURRENCY
- 1.7 STAKEHOLDERS
- 1.8 SUMMARY OF CHANGES

### 2 RESEARCH METHODOLOGY

#### 2.1 RESEARCH DATA

FIGURE 1 LEAK DETECTION MARKET FOR OIL & GAS: PROCESS FLOW OF MARKET SIZE ESTIMATION

FIGURE 2 LEAK DETECTION MARKET FOR OIL & GAS: RESEARCH DESIGN

##### 2.1.1 SECONDARY DATA

2.1.1.1 Key data from secondary sources

##### 2.1.2 PRIMARY DATA

2.1.2.1 Key industry insights

2.1.2.2 Breakdown of primaries

2.1.2.3 Key data from primary sources

#### 2.2 MARKET SIZE ESTIMATION

FIGURE 3 MARKET SIZE ESTIMATION METHODOLOGY: SUPPLY-SIDE ANALYSIS

FIGURE 4 MARKET SIZE ESTIMATION METHODOLOGY: APPROACH 2 (SUPPLY SIDE) – IDENTIFICATION OF REVENUES GENERATED BY COMPANIES FROM LEAK DETECTION SYSTEM OFFERINGS

##### 2.2.1 BOTTOM-UP APPROACH

2.2.1.1 Approach for arriving at market size using bottom-up analysis (demand side)

FIGURE 5 LEAK DETECTION MARKET FOR OIL & GAS: BOTTOM-UP APPROACH

FIGURE 6 MARKET SIZE ESTIMATION METHODOLOGY: BOTTOM-UP APPROACH FOR ESTIMATING SIZE OF LEAK DETECTION MARKET FOR OIL & GAS

##### 2.2.2 TOP-DOWN APPROACH

2.2.2.1 Approach for arriving at market size using top-down analysis

(supply side)

FIGURE 7 LEAK DETECTION MARKET FOR OIL & GAS: TOP-DOWN APPROACH

2.3 MARKET BREAKDOWN AND DATA TRIANGULATION

FIGURE 8 DATA TRIANGULATION

2.4 RESEARCH ASSUMPTIONS

FIGURE 9 ASSUMPTIONS FOR RESEARCH STUDY

### **3 EXECUTIVE SUMMARY**

FIGURE 10 E-RTTM SEGMENT OF LEAK DETECTION MARKET FOR OIL & GAS TO GROW AT HIGHEST CAGR FROM 2020 TO 2025

FIGURE 11 NATURAL GAS SEGMENT TO LEAD LEAK DETECTION MARKET FOR OIL & GAS FROM 2020 TO 2025

FIGURE 12 LEAK DETECTION MARKET FOR OIL & GAS IN APAC TO GROW AT HIGHEST CAGR FROM 2020 TO 2025

### **4 PREMIUM INSIGHTS**

4.1 ATTRACTIVE OPPORTUNITIES IN LEAK DETECTION MARKET FOR OIL & GAS

FIGURE 13 EVOLVING GOVERNMENT REGULATIONS TO IMPLEMENT LEAK DETECTION SOLUTIONS AND SYSTEMS IN OIL AND GAS INDUSTRY TO DRIVE MARKET GROWTH

4.2 LEAK DETECTION MARKET FOR OIL & GAS IN NORTH AMERICA, BY MEDIUM AND COUNTRY

FIGURE 14 NATURAL GAS SEGMENT AND US TO HOLD LARGEST SHARES OF LEAK DETECTION MARKET FOR OIL & GAS IN NORTH AMERICA IN 2020

4.3 LEAK DETECTION MARKET FOR OIL & GAS IN APAC, BY TECHNOLOGY

FIGURE 15 E-RTTM SEGMENT TO LEAD OF LEAK DETECTION MARKET FOR OIL & GAS

BY 2025

4.4 LEAK DETECTION MARKET FOR OIL & GAS, BY COUNTRY

FIGURE 16 LEAK DETECTION MARKET FOR OIL & GAS IN CHINA TO GROW AT HIGHEST CAGR FROM 2020 TO 2025

### **5 MARKET OVERVIEW**

5.1 INTRODUCTION

5.2 MARKET DYNAMICS

FIGURE 17 EVOLVING GOVERNMENT REGULATIONS PERTAINING TO

## IMPLEMENTATION OF LEAK DETECTION SYSTEMS

### FIGURE 18 LEAK DETECTION MARKET FOR OIL & GAS: DRIVERS, RESTRAINTS, OPPORTUNITIES, AND CHALLENGES IMPACT ANALYSIS

#### 5.2.1 DRIVERS

5.2.1.1 Increasing incidents of oil and gas leakages in pipelines and storage tanks at production facilities

TABLE 1 OIL AND GAS LEAK INCIDENTS, JANUARY 2019–JUNE 2020

5.2.1.2 Ongoing construction of new pipelines and expansion of existing ones

5.2.1.3 Evolving government regulations pertaining to implementation of leak detection systems

#### 5.2.2 RESTRAINTS

5.2.2.1 Retrofitting complications related to some leak detection systems

#### 5.2.3 OPPORTUNITIES

5.2.3.1 Rising oil and gas exploration and production activities worldwide

5.2.3.2 Increasing global oil and natural gas consumption

FIGURE 19 GLOBAL OIL CONSUMPTION, 2011–2019 (THOUSAND BARRELS DAILY)

TABLE 2 OIL CONSUMPTION, BY REGION, 2011–2019 (THOUSAND BARRELS DAILY)

FIGURE 20 NATURAL GAS CONSUMPTION, BY REGION, 2011–2019 (BILLION CUBIC METERS)

TABLE 3 NATURAL GAS CONSUMPTION, BY REGION, 2011–2019 (BILLION CUBIC METERS)

5.2.3.3 Ongoing technological advancements related to leak detection systems

#### 5.2.4 CHALLENGES

5.2.4.1 Lack of technological advancements in offshore leak detection systems

5.2.4.2 Decrease in global oil prices

TABLE 4 ASP ANALYSIS OF DIFFERENT OIL TYPES, 2018–2021

#### 5.3 VALUE CHAIN ANALYSIS

FIGURE 21 VALUE CHAIN ANALYSIS OF LEAK DETECTION MARKET FOR OIL & GAS

#### 5.4 GOVERNMENT REGULATIONS AND STANDARDS RELATED TO LEAK DETECTION SYSTEMS

#### 5.5 TECHNOLOGY ANALYSIS

#### 5.6 PATENT ANALYSIS

#### 5.7 USE CASES FOR LEAK DETECTION MARKET FOR OIL & GAS

#### 5.8 ASP ANALYSIS OF LEAK DETECTION SYSTEMS BASED ON DIFFERENT TECHNOLOGIES

TABLE 5 ASP ANALYSIS OF LEAK DETECTION SYSTEMS BASED ON DIFFERENT

TECHNOLOGIES, 2020–2025 (USD)

## 5.9 TRADE ANALYSIS FOR OIL & GAS

FIGURE 22 OIL IMPORT DATA OF GEOGRAPHIES IN TERMS OF THOUSAND BARRELS DAILY FROM 2010 TO 2019

TABLE 6 OIL IMPORT DATA, BY GEOGRAPHY, 2010–2019  
(THOUSAND BARRELS DAILY)

FIGURE 23 OIL EXPORT DATA OF GEOGRAPHIES IN TERMS OF THOUSAND BARRELS DAILY FROM 2010 TO 2019

TABLE 7 OIL EXPORT DATA, BY GEOGRAPHY, 2010–2019  
(THOUSAND BARRELS DAILY)

FIGURE 24 NATURAL GAS IMPORTS, BY REGION, 2019 (BILLION CUBIC METERS)

TABLE 8 NATURAL GAS IMPORTS, BY REGION, 2019 (BILLION CUBIC METERS)

FIGURE 25 NATURAL GAS EXPORTS, BY REGION, 2019 (BILLION CUBIC METERS)

TABLE 9 NATURAL GAS EXPORTS, BY REGION, 2019 (BILLION CUBIC METERS)

## 5.10 OIL AND GAS INDUSTRY ECOSYSTEM

# 6 LEAK DETECTION MARKET FOR OIL & GAS, BY MEDIUM

## 6.1 INTRODUCTION

FIGURE 26 NATURAL GAS SEGMENT TO LEAD LEAK DETECTION MARKET FOR OIL & GAS FROM 2020 TO 2025

TABLE 10 LEAK DETECTION MARKET FOR OIL & GAS, BY MEDIUM, 2017–2019  
(USD MILLION)

TABLE 11 LEAK DETECTION MARKET FOR OIL & GAS, BY MEDIUM, 2020–2025  
(USD MILLION)

## 6.2 OIL AND CONDENSATE

6.2.1 TRANSPORTATION OF CRUDE OIL THROUGH PIPELINES REQUIRE EFFICIENT LEAK DETECTION SYSTEMS FOR MINIMAL ECOLOGICAL IMPACT AND FINANCIAL LOSSES

TABLE 12 LEAK DETECTION MARKET FOR OIL AND CONDENSATE, BY TECHNOLOGY, 2017–2019 (USD MILLION)

TABLE 13 LEAK DETECTION MARKET FOR OIL AND CONDENSATE, BY TECHNOLOGY, 2020–2025 (USD MILLION)

TABLE 14 LEAK DETECTION MARKET FOR OIL AND CONDENSATE, BY REGION, 2017–2019 (USD MILLION)

TABLE 15 LEAK DETECTION MARKET FOR OIL AND CONDENSATE, BY REGION, 2020–2025 (USD MILLION)

## 6.3 NATURAL GAS

### 6.3.1 INCREASED EXPLORATION, PRODUCTION, AND CONSUMPTION OF NATURAL GAS TO FUEL MARKET GROWTH

FIGURE 27 E-RTTM SEGMENT OF LEAK DETECTION MARKET FOR NATURAL GAS TO GROW AT HIGHEST CAGR FROM 2020 TO 2025

TABLE 16 LEAK DETECTION MARKET FOR NATURAL GAS, BY TECHNOLOGY, 2017–2019 (USD MILLION)

TABLE 17 LEAK DETECTION MARKET FOR NATURAL GAS, BY TECHNOLOGY, 2020–2025 (USD MILLION)

TABLE 18 LEAK DETECTION MARKET FOR NATURAL GAS, BY REGION, 2017–2019 (USD MILLION)

TABLE 19 LEAK DETECTION MARKET FOR NATURAL GAS, BY REGION, 2020–2025 (USD MILLION)

### 6.4 IMPACT OF COVID-19

## 7 LEAK DETECTION MARKET FOR OIL & GAS, BY TECHNOLOGY

### 7.1 INTRODUCTION

FIGURE 28 E-RTTM SEGMENT TO ACCOUNT FOR LARGEST SIZE OF LEAK DETECTION MARKET FOR OIL & GAS IN 2025

TABLE 20 LEAK DETECTION MARKET FOR OIL & GAS, BY TECHNOLOGY, 2017–2019 (USD MILLION)

TABLE 21 LEAK DETECTION MARKET FOR OIL & GAS, BY TECHNOLOGY, 2020–2025 (USD MILLION)

TABLE 22 LEAK DETECTION MARKET FOR OIL & GAS, BY TECHNOLOGY, 2020–2025 (THOUSAND UNITS)

### 7.2 ACOUSTIC/ULTRASOUND

7.2.1 RISEN USE OF ACOUSTIC/ULTRASOUND TECHNOLOGY-BASED LEAK DETECTION SYSTEMS IN BOTH SINGLE-PHASE AND MULTI-PHASE FLOW PIPELINES

TABLE 23 ACOUSTIC/ULTRASONIC TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS, BY MEDIUM, 2017–2019 (USD MILLION)

TABLE 24 ACOUSTIC/ULTRASONIC TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS, BY MEDIUM, 2020–2025 (USD MILLION)

TABLE 25 ACOUSTIC/ULTRASONIC TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL AND CONDENSATE, BY REGION, 2017–2019 (USD MILLION)

TABLE 26 ACOUSTIC/ULTRASONIC TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL AND CONDENSATE, BY REGION, 2020–2025 (USD MILLION)

TABLE 27 ACOUSTIC/ULTRASONIC TECHNOLOGY-BASED LEAK DETECTION MARKET FOR NATURAL GAS, BY REGION, 2017–2019 (USD MILLION)

TABLE 28 ACOUSTIC/ULTRASONIC TECHNOLOGY-BASED LEAK DETECTION MARKET FOR NATURAL GAS, BY REGION, 2020–2025 (USD MILLION)

TABLE 29 ACOUSTIC/ULTRASONIC TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS, BY REGION, 2017–2019 (USD MILLION)

FIGURE 29 ACOUSTIC/ULTRASONIC TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS IN APAC TO GROW AT HIGHEST CAGR FROM 2020 TO 2025

TABLE 30 ACOUSTIC/ULTRASONIC TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS, BY REGION, 2020–2025 (USD MILLION)

### 7.3 EXTENDED REAL-TIME TRANSIENT MODEL (E-RTTM)

7.3.1 INCREASED DEMAND FOR E-RTTM TECHNOLOGY-BASED LEAK DETECTION SYSTEMS TO MEET EXISTING AND NEW LEAK DETECTION REGULATORY REQUIREMENTS

TABLE 31 E-RTTM TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS, BY MEDIUM, 2017–2019 (USD MILLION)

TABLE 32 E-RTTM TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS, BY MEDIUM, 2020–2025 (USD MILLION)

TABLE 33 E-RTTM TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL AND CONDENSATE, BY REGION, 2017–2019 (USD MILLION)

TABLE 34 E-RTTM TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL AND CONDENSATE, BY REGION, 2020–2025 (USD MILLION)

TABLE 35 E-RTTM TECHNOLOGY-BASED LEAK DETECTION MARKET FOR NATURAL GAS, BY REGION, 2017–2019 (USD MILLION)

TABLE 36 E-RTTM TECHNOLOGY-BASED LEAK DETECTION MARKET FOR NATURAL GAS, BY REGION, 2020–2025 (USD MILLION)

FIGURE 30 NORTH AMERICA TO ACCOUNT FOR LARGEST SIZE OF E-RTTM TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS FROM 2020 TO 2025

TABLE 37 E-RTTM TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS, BY REGION, 2017–2019 (USD MILLION)

TABLE 38 E-RTTM TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS, BY REGION, 2020–2025 (USD MILLION)

### 7.4 FIBER OPTIC

7.4.1 LOWER OVERALL COSTS OF DISTRIBUTED FIBER-OPTIC SENSORS THAN TRADITIONAL SENSORS LEAD TO THEIR INCREASED USE

TABLE 39 FIBER-OPTIC TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS, BY MEDIUM, 2017–2019 (USD MILLION)

TABLE 40 FIBER-OPTIC TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS, BY MEDIUM, 2020–2025 (USD MILLION)

TABLE 41 FIBER-OPTIC TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL AND CONDENSATE, BY REGION, 2017–2019 (USD MILLION)

TABLE 42 FIBER-OPTIC TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL AND CONDENSATE, BY REGION, 2020–2025 (USD MILLION)

TABLE 43 FIBER-OPTIC TECHNOLOGY-BASED LEAK DETECTION MARKET FOR NATURAL GAS, BY REGION, 2017–2019 (USD MILLION)

TABLE 44 FIBER-OPTIC TECHNOLOGY-BASED LEAK DETECTION MARKET FOR NATURAL GAS, BY REGION, 2020–2025 (USD MILLION)

TABLE 45 FIBER-OPTIC TECHNOLOGY-BASED LEAK DETECTION MARKET OIL & GAS, BY REGION, 2017–2019 (USD MILLION)

TABLE 46 FIBER-OPTIC TECHNOLOGY-BASED LEAK DETECTION MARKET OIL & GAS, BY REGION, 2020–2025 (USD MILLION)

## 7.5 MASS/VOLUME BALANCE

7.5.1 DISCREPANCY BETWEEN MEASURED MASS-VOLUME FLOWS AT DIFFERENT ENDS OF PIPELINE INDICATE PRESENCE OF LEAKAGES

TABLE 47 MASS/VOLUME BALANCE TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS, BY MEDIUM, 2017–2019 (USD MILLION)

TABLE 48 MASS/VOLUME BALANCE TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS, BY MEDIUM, 2020–2025 (USD MILLION)

TABLE 49 MASS/VOLUME BALANCE TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL AND CONDENSATE, BY REGION, 2017–2019 (USD MILLION)

TABLE 50 MASS/VOLUME BALANCE TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL AND CONDENSATE, BY REGION, 2020–2025 (USD MILLION)

TABLE 51 MASS/VOLUME BALANCE TECHNOLOGY-BASED LEAK DETECTION MARKET FOR NATURAL GAS, BY REGION, 2017–2019 (USD MILLION)

TABLE 52 MASS/VOLUME BALANCE TECHNOLOGY-BASED LEAK DETECTION MARKET FOR NATURAL GAS, BY REGION, 2020–2025 (USD MILLION)

FIGURE 31 MASS/VOLUME BALANCE TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS IN APAC TO GROW AT HIGHEST CAGR FROM 2020 TO 2025

TABLE 53 MASS/VOLUME BALANCE TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS, BY REGION, 2017–2019 (USD MILLION)

TABLE 54 MASS/VOLUME BALANCE TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS, BY REGION, 2020–2025 (USD MILLION)

## 7.6 THERMAL IMAGING

7.6.1 INCREASED USE OF THERMAL IMAGERS MOUNTED ON VEHICLES, UAV, AND PORTABLE SYSTEMS TO INSPECT PIPELINES FOR DETECTION OF LEAKAGES

TABLE 55 THERMAL IMAGING TECHNOLOGY-BASED LEAK DETECTION MARKET

FOR OIL & GAS, BY MEDIUM, 2017–2019 (USD MILLION)

TABLE 56 THERMAL IMAGING TECHNOLOGY-BASED LEAK DETECTION MARKET  
FOR OIL & GAS, BY MEDIUM, 2020–2025 (USD MILLION)

TABLE 57 THERMAL IMAGING TECHNOLOGY-BASED LEAK DETECTION MARKET  
FOR OIL AND CONDENSATE, BY REGION, 2017–2019 (USD MILLION)

TABLE 58 THERMAL IMAGING TECHNOLOGY-BASED LEAK DETECTION MARKET  
FOR OIL AND CONDENSATE, BY REGION, 2020–2025 (USD MILLION)

TABLE 59 THERMAL IMAGING TECHNOLOGY-BASED LEAK DETECTION MARKET  
FOR NATURAL GAS, BY REGION, 2017–2019 (USD MILLION)

TABLE 60 THERMAL IMAGING TECHNOLOGY-BASED LEAK DETECTION MARKET  
FOR NATURAL GAS, BY REGION, 2020–2025 (USD MILLION)

TABLE 61 THERMAL IMAGING TECHNOLOGY-BASED LEAK DETECTION MARKET  
FOR OIL & GAS, BY REGION, 2017–2019 (USD MILLION)

TABLE 62 THERMAL IMAGING TECHNOLOGY-BASED LEAK DETECTION MARKET  
FOR OIL & GAS, BY REGION, 2020–2025 (USD MILLION)

## 7.7 LASER ABSORPTION AND LIDAR

7.7.1 HIGH SENSITIVITY OF LASER TECHNOLOGY-BASED LEAK DETECTION  
SYSTEMS DRIVE MARKET GROWTH

TABLE 63 LASER ABSORPTION AND LIDAR TECHNOLOGY-BASED LEAK  
DETECTION MARKET FOR OIL & GAS, BY MEDIUM, 2017–2019 (USD MILLION)

TABLE 64 LASER ABSORPTION AND LIDAR TECHNOLOGY-BASED LEAK  
DETECTION MARKET FOR OIL & GAS, BY MEDIUM, 2020–2025 (USD MILLION)

TABLE 65 LASER ABSORPTION AND LIDAR TECHNOLOGY-BASED LEAK  
DETECTION MARKET FOR OIL AND CONDENSATE, BY REGION, 2017–2019 (USD  
MILLION)

TABLE 66 LASER ABSORPTION AND LIDAR TECHNOLOGY-BASED LEAK  
DETECTION MARKET FOR OIL AND CONDENSATE, BY REGION, 2020–2025 (USD  
MILLION)

TABLE 67 LASER ABSORPTION AND LIDAR TECHNOLOGY-BASED LEAK  
DETECTION MARKET FOR NATURAL GAS, BY REGION, 2017–2019 (USD MILLION)

TABLE 68 LASER ABSORPTION AND LIDAR TECHNOLOGY-BASED LEAK  
DETECTION MARKET FOR NATURAL GAS, BY REGION, 2020–2025 (USD MILLION)

TABLE 69 LASER ABSORPTION AND LIDAR TECHNOLOGY-BASED LEAK  
DETECTION MARKET FOR OIL & GAS, BY REGION, 2017–2019 (USD MILLION)

TABLE 70 LASER ABSORPTION AND LIDAR TECHNOLOGY-BASED LEAK  
DETECTION MARKET FOR OIL & GAS, BY REGION, 2020–2025 (USD MILLION)

## 7.8 VAPOR SENSING

7.8.1 LEAK DETECTION SYSTEMS BASED ON VAPOR SENSING TECHNOLOGY  
CAN DETECT SMALL LEAKAGES IN PIPELINES

TABLE 71 VAPOR SENSING TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS, BY MEDIUM, 2017–2019 (USD MILLION)

TABLE 72 VAPOR SENSING TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS, BY MEDIUM, 2020–2025 (USD MILLION)

TABLE 73 VAPOR SENSING TECHNOLOGY–BASED LEAK DETECTION MARKET FOR OIL AND CONDENSATE, BY REGION, 2017–2019 (USD MILLION)

TABLE 74 VAPOR SENSING TECHNOLOGY–BASED LEAK DETECTION MARKET FOR OIL AND CONDENSATE, BY REGION, 2020–2025 (USD MILLION)

TABLE 75 VAPOR SENSING TECHNOLOGY–BASED LEAK DETECTION MARKET FOR NATURAL GAS, BY REGION, 2017–2019 (USD MILLION)

TABLE 76 VAPOR SENSING TECHNOLOGY–BASED LEAK DETECTION MARKET FOR NATURAL GAS, BY REGION, 2020–2025 (USD MILLION)

TABLE 77 VAPOR SENSING TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS, BY REGION, 2017–2019 (USD MILLION)

TABLE 78 VAPOR SENSING TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS, BY REGION, 2020–2025 (USD MILLION)

## 7.9 IMPACT OF COVID-19

## 8 LEAK DETECTION MARKET FOR OIL & GAS, BY LOCATION

### 8.1 INTRODUCTION

FIGURE 32 ONSHORE SEGMENT TO LEAD LEAK DETECTION MARKET FOR OIL & GAS FROM 2020 TO 2025

TABLE 79 LEAK DETECTION MARKET FOR OIL & GAS, BY LOCATION, 2017–2019 (USD MILLION)

TABLE 80 LEAK DETECTION MARKET FOR OIL & GAS, BY LOCATION, 2020–2025 (USD MILLION)

### 8.2 ONSHORE

8.2.1 RISEN ONSHORE PRODUCTION OF OIL AND GAS TO DRIVE MARKET GROWTH

### 8.3 OFFSHORE

8.3.1 DEGRADATION OF OCEAN WATERS DUE TO OIL AND GAS LEAKAGES EXPECTED TO DRIVE DEMAND FOR LEAK DETECTION SYSTEMS AND TECHNOLOGIES IN OFFSHORE FACILITIES

## 9 DIFFERENT PROCESS STAGES FOR OIL AND GAS LEAK DETECTION

### 9.1 INTRODUCTION

### 9.2 UPSTREAM

9.3 MIDSTREAM

9.4 DOWNSTREAM

## **10 GEOGRAPHIC ANALYSIS**

### **10.1 INTRODUCTION**

FIGURE 33 NORTH AMERICA TO ACCOUNT FOR LARGEST SIZE OF LEAK DETECTION MARKET FOR OIL & GAS FROM 2020 TO 2025

TABLE 81 LEAK DETECTION MARKET FOR OIL & GAS, BY REGION, 2017–2019 (USD MILLION)

TABLE 82 LEAK DETECTION MARKET FOR OIL & GAS, BY REGION, 2020–2025 (USD MILLION)

### **10.2 NORTH AMERICA**

FIGURE 34 SNAPSHOT: LEAK DETECTION MARKET FOR OIL & GAS IN NORTH AMERICA

FIGURE 35 NATURAL GAS SEGMENT TO LEAD LEAK DETECTION MARKET FOR OIL & GAS IN NORTH AMERICA FROM 2020 TO 2025

TABLE 83 LEAK DETECTION MARKET FOR OIL & GAS IN NORTH AMERICA, BY MEDIUM, 2017–2019 (USD MILLION)

TABLE 84 LEAK DETECTION MARKET FOR OIL & GAS IN NORTH AMERICA, BY MEDIUM, 2020–2025 (USD MILLION)

TABLE 85 LEAK DETECTION MARKET FOR OIL & GAS IN NORTH AMERICA, BY TECHNOLOGY, 2017–2019 (USD MILLION)

TABLE 86 LEAK DETECTION MARKET FOR OIL & GAS IN NORTH AMERICA, BY TECHNOLOGY, 2020–2025 (USD MILLION)

FIGURE 36 US TO LEAD LEAK DETECTION MARKET FOR OIL & GAS IN NORTH AMERICA FROM 2020 TO 2025

TABLE 87 LEAK DETECTION MARKET FOR OIL & GAS IN NORTH AMERICA, BY COUNTRY, 2017–2019 (USD MILLION)

TABLE 88 LEAK DETECTION MARKET FOR OIL & GAS IN NORTH AMERICA, BY COUNTRY, 2020–2025 (USD MILLION)

TABLE 89 ACOUSTIC/ULTRASONIC TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS IN NORTH AMERICA, BY COUNTRY, 2017–2019 (USD MILLION)

TABLE 90 ACOUSTIC/ULTRASONIC TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS IN NORTH AMERICA, BY COUNTRY, 2020–2025 (USD MILLION)

TABLE 91 E-RTTM TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS IN NORTH AMERICA, BY COUNTRY, 2017–2019 (USD MILLION)

TABLE 92 E-RTTM TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS IN NORTH AMERICA, BY COUNTRY, 2020–2025 (USD MILLION)

TABLE 93 FIBER-OPTIC TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS IN NORTH AMERICA, BY COUNTRY, 2017–2019 (USD MILLION)

TABLE 94 FIBER-OPTIC TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS IN NORTH AMERICA, BY COUNTRY, 2020–2025 (USD MILLION)

TABLE 95 MASS/VOLUME TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS IN NORTH AMERICA, BY COUNTRY, 2017–2019 (USD MILLION)

TABLE 96 MASS/VOLUME TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS IN NORTH AMERICA, BY COUNTRY, 2020–2025 (USD MILLION)

TABLE 97 THERMAL IMAGING TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS IN NORTH AMERICA, BY COUNTRY, 2017–2019 (USD MILLION)

TABLE 98 THERMAL IMAGING TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS IN NORTH AMERICA, BY COUNTRY, 2020–2025 (USD MILLION)

TABLE 99 LASER ABSORPTION AND LIDAR TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS IN NORTH AMERICA, BY COUNTRY, 2017–2019 (USD MILLION)

TABLE 100 LASER ABSORPTION AND LIDAR TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS IN NORTH AMERICA, BY COUNTRY, 2020–2025 (USD MILLION)

TABLE 101 VAPOR SENSING TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS IN NORTH AMERICA, BY COUNTRY, 2017–2019 (USD MILLION)

TABLE 102 VAPOR SENSING TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS IN NORTH AMERICA, BY COUNTRY, 2020–2025 (USD MILLION)

#### 10.2.1 US

10.2.1.1 Ongoing development and expansion of existing pipelines and construction of new ones to drive market growth in US

#### 10.2.2 CANADA

10.2.2.1 Increasing adoption of government regulations in Canada to provide guidance for best management practices related to leak detection in pipelines

#### 10.2.3 MEXICO

10.2.3.1 Ongoing development of leak detection infrastructures in Mexico to drive market growth

### 10.3 EUROPE

FIGURE 37 SNAPSHOT: LEAK DETECTION MARKET FOR OIL & GAS IN EUROPE

TABLE 103 LEAK DETECTION MARKET FOR OIL & GAS IN EUROPE, BY MEDIUM, 2017–2019 (USD MILLION)

TABLE 104 LEAK DETECTION MARKET FOR OIL & GAS IN EUROPE, BY MEDIUM, 2020–2025 (USD MILLION)

TABLE 105 LEAK DETECTION MARKET FOR OIL & GAS IN EUROPE, BY TECHNOLOGY, 2017–2019 (USD MILLION)

TABLE 106 LEAK DETECTION MARKET FOR OIL & GAS IN EUROPE, BY TECHNOLOGY, 2020–2025 (USD MILLION)

TABLE 107 LEAK DETECTION MARKET FOR OIL & GAS IN EUROPE, BY COUNTRY, 2017–2019 (USD MILLION)

TABLE 108 LEAK DETECTION MARKET FOR OIL & GAS IN EUROPE, BY COUNTRY, 2020–2025 (USD MILLION)

TABLE 109 ACOUSTIC/ULTRASONIC TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS IN EUROPE, BY COUNTRY, 2017–2019 (USD MILLION)

TABLE 110 ACOUSTIC/ULTRASONIC TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS IN EUROPE, BY COUNTRY, 2020–2025 (USD MILLION)

TABLE 111 E-RTTM TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS IN EUROPE, BY COUNTRY, 2017–2019 (USD MILLION)

TABLE 112 E-RTTM TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS IN EUROPE, BY COUNTRY, 2020–2025 (USD MILLION)

TABLE 113 FIBER-OPTIC TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS IN EUROPE, BY COUNTRY, 2017–2019 (USD MILLION)

TABLE 114 FIBER-OPTIC TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS IN EUROPE, BY COUNTRY, 2020–2025 (USD MILLION)

TABLE 115 MASS/VOLUME BALANCE TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS IN EUROPE, BY COUNTRY, 2017–2019 (USD MILLION)

TABLE 116 MASS/VOLUME BALANCE TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS IN EUROPE, BY COUNTRY, 2020–2025 (USD MILLION)

TABLE 117 THERMAL IMAGING TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS IN EUROPE, BY COUNTRY, 2017–2019 (USD MILLION)

TABLE 118 THERMAL IMAGING TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS IN EUROPE, BY COUNTRY, 2020–2025 (USD MILLION)

TABLE 119 LASER ABSORPTION AND LIDAR TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS IN EUROPE, BY COUNTRY, 2017–2019 (USD MILLION)

TABLE 120 LASER ABSORPTION AND LIDAR TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS IN EUROPE, BY COUNTRY, 2020–2025 (USD MILLION)

TABLE 121 VAPOR SENSING TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS IN EUROPE, BY COUNTRY, 2017–2019 (USD MILLION)

TABLE 122 VAPOR SENSING TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS IN EUROPE, BY COUNTRY, 2020–2025 (USD MILLION)

### 10.3.1 RUSSIA

10.3.1.1 Surging requirement of leak detection technologies and systems in Russia as it is second-largest producer of oil and gas in world

#### 10.3.2 UKRAINE

10.3.2.1 Rising demand for leak detection technologies and systems for use in dense network of primary and secondary pipelines of Ukraine

#### 10.3.3 GERMANY

10.3.3.1 Importing of petroleum and other liquids through several pipelines and seaports to contribute to demand for leak detection technologies and systems in Germany

#### 10.3.4 UK

10.3.4.1 Launching of new oil and gas projects in UK to fuel demand for leak detection technologies and systems

#### 10.3.5 FRANCE

10.3.5.1 Increasing focus on stringent implementation of government regulations pertaining to deployment of leak detection systems to fuel market growth in France

#### 10.3.6 ITALY

10.3.6.1 Emerging of Italy as major transit country for crude oil increases requirement of leak detection technologies and systems

#### 10.3.7 REST OF EUROPE

### 10.4 APAC

FIGURE 38 SNAPSHOT: LEAK DETECTION MARKET FOR OIL & GAS IN APAC

TABLE 123 LEAK DETECTION MARKET FOR OIL & GAS IN APAC, BY MEDIUM, 2017–2019 (USD MILLION)

TABLE 124 LEAK DETECTION MARKET FOR OIL & GAS IN APAC, BY MEDIUM, 2020–2025 (USD MILLION)

FIGURE 39 E-RTTM SEGMENT OF LEAK DETECTION MARKET FOR OIL & GAS IN APAC TO GROW AT HIGHEST CAGR FROM 2020 TO 2025

TABLE 125 LEAK DETECTION MARKET FOR OIL & GAS IN APAC, BY TECHNOLOGY, 2017–2019 (USD MILLION)

TABLE 126 LEAK DETECTION MARKET FOR OIL & GAS IN APAC, BY TECHNOLOGY, 2020–2025 (USD MILLION)

FIGURE 40 LEAK DETECTION MARKET FOR OIL & GAS IN CHINA TO GROW AT HIGHEST CAGR FROM 2020 TO 2025

TABLE 127 LEAK DETECTION MARKET FOR OIL & GAS IN APAC, BY COUNTRY, 2017–2019 (USD MILLION)

TABLE 128 LEAK DETECTION MARKET FOR OIL & GAS IN APAC, BY COUNTRY, 2020–2025 (USD MILLION)

TABLE 129 ACOUSTIC/ULTRASONIC TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS IN APAC, BY COUNTRY, 2017–2019 (USD MILLION)

TABLE 130 ACOUSTIC/ULTRASONIC TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS IN APAC, BY COUNTRY, 2020–2025 (USD MILLION)

TABLE 131 E-RTTM TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS IN APAC, BY COUNTRY, 2017–2019 (USD MILLION)

TABLE 132 E-RTTM TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS IN APAC, BY COUNTRY, 2020–2025 (USD MILLION)

TABLE 133 FIBER-OPTIC TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS IN APAC, BY COUNTRY, 2017–2019 (USD MILLION)

TABLE 134 FIBER-OPTIC TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS IN APAC, BY COUNTRY, 2020–2025 (USD MILLION)

TABLE 135 MASS/VOLUME BALANCE TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS IN APAC, BY COUNTRY, 2017–2019 (USD MILLION)

TABLE 136 MASS/VOLUME BALANCE TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS IN APAC, BY COUNTRY, 2020–2025 (USD MILLION)

TABLE 137 THERMAL IMAGING TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS IN APAC, BY COUNTRY, 2017–2019 (USD MILLION)

TABLE 138 THERMAL IMAGING TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS IN APAC, BY COUNTRY, 2020–2025 (USD MILLION)

TABLE 139 LASER ABSORPTION AND LIDAR TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS IN APAC, BY COUNTRY, 2017–2019 (USD MILLION)

TABLE 140 LASER ABSORPTION AND LIDAR TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS IN APAC, BY COUNTRY, 2020–2025 (USD MILLION)

TABLE 141 VAPOR SENSING TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS IN APAC, BY COUNTRY, 2017–2019 (USD MILLION)

TABLE 142 VAPOR SENSING TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS IN APAC, BY COUNTRY, 2020–2025 (USD MILLION)

#### 10.4.1 CHINA

10.4.1.1 Increasing demand for electricity and natural gas-fired power to contribute to growth of leak detection market for oil & gas in China

#### 10.4.2 AUSTRALIA

10.4.2.1 Flourishing oil and gas industry to drive the market for leak detection technologies and systems in Australia

#### 10.4.3 KAZAKHSTAN

10.4.3.1 Growing interest of Kazakhstan for development of its oil and natural gas industry to fuel demand for leak detection technologies and systems

#### 10.4.4 INDIA

10.4.4.1 Increasing government support to promote production and consumption of

natural gas in India

#### 10.4.5 INDONESIA

10.4.5.1 Ongoing oil and gas exploration activities in Indonesia to contribute to demand for leak detection technologies and systems

#### 10.4.6 JAPAN

10.4.6.1 Growing demand for leak detection systems in Japan as it is largest importer of oil

#### 10.4.7 REST OF APAC (ROAPAC)

### 10.5 SOUTH AND CENTRAL AMERICA

TABLE 143 LEAK DETECTION MARKET FOR OIL & GAS IN SOUTH AND CENTRAL AMERICA, BY MEDIUM, 2017–2019 (USD MILLION)

TABLE 144 LEAK DETECTION MARKET FOR OIL & GAS IN SOUTH AND CENTRAL AMERICA, BY MEDIUM, 2020–2025 (USD MILLION)

TABLE 145 LEAK DETECTION MARKET FOR OIL & GAS IN SOUTH AND CENTRAL AMERICA, BY TECHNOLOGY, 2017–2019 (USD MILLION)

TABLE 146 LEAK DETECTION MARKET FOR OIL & GAS IN SOUTH AND CENTRAL AMERICA, BY TECHNOLOGY, 2020–2025 (USD MILLION)

TABLE 147 LEAK DETECTION MARKET FOR OIL & GAS IN SOUTH AND CENTRAL AMERICA, BY COUNTRY, 2017–2019 (USD MILLION)

TABLE 148 LEAK DETECTION MARKET FOR OIL & GAS IN SOUTH AND CENTRAL AMERICA, BY COUNTRY, 2020–2025 (USD MILLION)

TABLE 149 ACOUSTIC/ULTRASONIC TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS IN SOUTH AND CENTRAL AMERICA, BY COUNTRY, 2017–2019 (USD MILLION)

TABLE 150 ACOUSTIC/ULTRASONIC TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS IN SOUTH AND CENTRAL AMERICA, BY COUNTRY, 2020–2025 (USD MILLION)

TABLE 151 E-RTTM TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS IN SOUTH AND CENTRAL AMERICA, BY COUNTRY, 2017–2019 (USD MILLION)

TABLE 152 E-RTTM TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS IN SOUTH AND CENTRAL AMERICA, BY COUNTRY, 2020–2025 (USD MILLION)

TABLE 153 FIBER-OPTIC TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS IN SOUTH AND CENTRAL AMERICA, BY COUNTRY, 2017–2019 (USD MILLION)

TABLE 154 FIBER-OPTIC TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS IN SOUTH AND CENTRAL AMERICA, BY COUNTRY, 2020–2025 (USD MILLION)

TABLE 155 MASS/VOLUME BALANCE TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS IN SOUTH AND CENTRAL AMERICA, BY COUNTRY, 2017–2019 (USD MILLION)

TABLE 156 MASS/VOLUME BALANCE TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS IN SOUTH AND CENTRAL AMERICA, BY COUNTRY, 2020–2025 (USD MILLION)

TABLE 157 THERMAL IMAGING TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS IN SOUTH AND CENTRAL AMERICA, BY COUNTRY, 2017–2019 (USD MILLION)

TABLE 158 THERMAL IMAGING TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS IN SOUTH AND CENTRAL AMERICA, BY COUNTRY, 2020–2025 (USD MILLION)

TABLE 159 LASER ABSORPTION AND LIDAR TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS IN SOUTH AND CENTRAL AMERICA, BY COUNTRY, 2017–2019 (USD MILLION)

TABLE 160 LASER ABSORPTION AND LIDAR TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS IN SOUTH AND CENTRAL AMERICA, BY COUNTRY, 2020–2025 (USD MILLION)

TABLE 161 VAPOR SENSING TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS IN SOUTH AND CENTRAL AMERICA, BY COUNTRY, 2017–2019 (USD MILLION)

TABLE 162 VAPOR SENSING TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS IN SOUTH AND CENTRAL AMERICA, BY COUNTRY, 2020–2025 (USD MILLION)

#### 10.5.1 ARGENTINA

10.5.1.1 Increasing investments in Argentina to harness natural gas resources contribute to growth of leak detection market for oil & gas

#### 10.5.2 BRAZIL

10.5.2.1 Rising upstream, midstream, and downstream activities in Brazil to attract increased investments for leak detection technologies and systems

#### 10.5.3 COLOMBIA

10.5.3.1 Growing natural gas and oil production in Colombia to contribute to demand for leak detection technologies and systems used in pipelines

#### 10.5.4 VENEZUELA

10.5.4.1 Increasing incidents of leakages in oil and gas pipelines and storage tanks of production facilities to fuel demand for leak detection technologies and systems in Venezuela

#### 10.5.5 REST OF SOUTH AND CENTRAL AMERICA

#### 10.6 MIDDLE EAST

TABLE 163 LEAK DETECTION MARKET FOR OIL & GAS IN MIDDLE EAST, BY MEDIUM, 2017–2019 (USD MILLION)

TABLE 164 LEAK DETECTION MARKET FOR OIL & GAS IN MIDDLE EAST, BY MEDIUM, 2020–2025 (USD MILLION)

TABLE 165 LEAK DETECTION MARKET FOR OIL & GAS IN MIDDLE EAST, BY TECHNOLOGY, 2017–2019 (USD MILLION)

TABLE 166 LEAK DETECTION MARKET FOR OIL & GAS IN MIDDLE EAST, BY TECHNOLOGY, 2020–2025 (USD MILLION)

TABLE 167 LEAK DETECTION MARKET FOR OIL & GAS IN MIDDLE EAST, BY COUNTRY, 2017–2019 (USD MILLION)

TABLE 168 LEAK DETECTION MARKET FOR OIL & GAS IN MIDDLE EAST, BY COUNTRY, 2020–2025 (USD MILLION)

TABLE 169 ACOUSTIC/ULTRASONIC TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS IN MIDDLE EAST, BY COUNTRY, 2017–2019 (USD MILLION)

TABLE 170 ACOUSTIC/ULTRASONIC TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS IN MIDDLE EAST, BY COUNTRY, 2020–2025 (USD MILLION)

TABLE 171 E-RTTM TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS IN MIDDLE EAST, BY COUNTRY, 2017–2019 (USD MILLION)

TABLE 172 E-RTTM TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS IN MIDDLE EAST, BY COUNTRY, 2020–2025 (USD MILLION)

TABLE 173 FIBER-OPTIC TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS IN MIDDLE EAST, BY COUNTRY, 2017–2019 (USD MILLION)

TABLE 174 FIBER-OPTIC TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS IN MIDDLE EAST, BY COUNTRY, 2020–2025 (USD MILLION)

TABLE 175 MASS/VOLUME TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS IN MIDDLE EAST, BY COUNTRY, 2017–2019 (USD MILLION)

TABLE 176 MASS/VOLUME TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS IN MIDDLE EAST, BY COUNTRY, 2020–2025 (USD MILLION)

TABLE 177 THERMAL IMAGING TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS IN MIDDLE EAST, BY COUNTRY, 2017–2019 (USD MILLION)

TABLE 178 THERMAL IMAGING TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS IN MIDDLE EAST, BY COUNTRY, 2020–2025 (USD MILLION)

TABLE 179 LASER ABSORPTION AND LIDAR LEAK DETECTION MARKET FOR OIL & GAS IN MIDDLE EAST, BY COUNTRY, 2017–2019 (USD MILLION)

TABLE 180 LASER ABSORPTION AND LIDAR LEAK DETECTION MARKET FOR OIL

& GAS IN MIDDLE EAST, BY COUNTRY, 2020–2025 (USD MILLION)

TABLE 181 VAPOR SENSING TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS IN MIDDLE EAST, BY COUNTRY, 2017–2019 (USD MILLION)

TABLE 182 VAPOR SENSING TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS IN MIDDLE EAST, BY COUNTRY, 2020–2025 (USD MILLION)

#### 10.6.1 IRAN

10.6.1.1 Ongoing developments in oil and gas pipeline infrastructures in Iran to drive demand for leak detection technologies and systems

#### 10.6.2 SAUDI ARABIA

10.6.2.1 Rising number of oil and gas production projects in Saudi Arabia to fuel market growth

#### 10.6.3 IRAQ

10.6.3.1 Upcoming oil and gas production projects in Iraq to contribute to demand for leak detection technologies and systems

#### 10.6.4 OMAN

10.6.4.1 Rising demand for natural gas to fuel growth of leak detection market for oil & gas in Oman as it is recognized as one of its leading producers

#### 10.6.5 UAE

10.6.5.1 Increasing natural gas imports by UAE to meet its domestic demand and support upcoming natural gas projects

#### 10.6.6 REST OF MIDDLE EAST

### 10.7 AFRICA

TABLE 183 LEAK DETECTION MARKET FOR OIL & GAS IN AFRICA, BY MEDIUM, 2017–2019 (USD MILLION)

TABLE 184 LEAK DETECTION MARKET FOR OIL & GAS IN AFRICA, BY MEDIUM, 2020–2025 (USD MILLION)

TABLE 185 LEAK DETECTION MARKET FOR OIL & GAS IN AFRICA, BY TECHNOLOGY, 2017–2019 (USD MILLION)

TABLE 186 LEAK DETECTION MARKET FOR OIL & GAS IN AFRICA, BY TECHNOLOGY, 2020–2025 (USD MILLION)

TABLE 187 LEAK DETECTION MARKET FOR OIL & GAS IN AFRICA, BY COUNTRY, 2017–2019 (USD MILLION)

TABLE 188 LEAK DETECTION MARKET FOR OIL & GAS IN AFRICA, BY COUNTRY, 2020–2025 (USD MILLION)

TABLE 189 ACOUSTIC/ULTRASONIC TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS IN AFRICA, BY COUNTRY, 2017–2019 (USD MILLION)

TABLE 190 ACOUSTIC/ULTRASONIC TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS IN AFRICA, BY COUNTRY, 2020–2025 (USD MILLION)

TABLE 191 E-RTTM TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL &

GAS IN AFRICA, BY COUNTRY, 2017–2019 (USD MILLION)

TABLE 192 E-RTTM TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS IN AFRICA, BY COUNTRY, 2020–2025 (USD MILLION)

TABLE 193 FIBER-OPTIC TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS IN AFRICA, BY COUNTRY, 2017–2019 (USD MILLION)

TABLE 194 FIBER-OPTIC TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS IN AFRICA, BY COUNTRY, 2020–2025 (USD MILLION)

TABLE 195 MASS/VOLUME BALANCE TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS IN AFRICA, BY COUNTRY, 2017–2019 (USD MILLION)

TABLE 196 MASS/VOLUME BALANCE TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS IN AFRICA, BY COUNTRY, 2020–2025 (USD MILLION)

TABLE 197 THERMAL IMAGING TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS IN AFRICA, BY COUNTRY, 2017–2019 (USD MILLION)

TABLE 198 THERMAL IMAGING TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS IN AFRICA, BY COUNTRY, 2020–2025 (USD MILLION)

TABLE 199 LASER ABSORPTION AND LIDAR TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS IN AFRICA, BY COUNTRY, 2017–2019 (USD MILLION)

TABLE 200 LASER ABSORPTION AND LIDAR TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS IN AFRICA, BY COUNTRY, 2020–2025 (USD MILLION)

TABLE 201 VAPOR SENSING TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS IN AFRICA, BY COUNTRY, 2017–2019 (USD MILLION)

TABLE 202 VAPOR SENSING TECHNOLOGY-BASED LEAK DETECTION MARKET FOR OIL & GAS IN AFRICA, BY COUNTRY, 2020–2025 (USD MILLION)

#### 10.7.1 ALGERIA

10.7.1.1 Ongoing pipeline projects in Algeria to lead to market growth

#### 10.7.2 EGYPT

10.7.2.1 Increasing investments in oil and gas industry of Egypt to fuel market growth

#### 10.7.3 NIGERIA

10.7.3.1 Evolving government regulations regarding gas transportation to encourage private investments in pipeline projects in Nigeria

#### 10.7.4 LIBYA

10.7.4.1 Increasing focus on new and advanced oil and gas projects to fuel growth of leak detection market for oil & gas in Libya

#### 10.7.5 REST OF AFRICA

### 10.8 IMPACT OF COVID-19

## 11 COMPETITIVE LANDSCAPE

## 11.1 OVERVIEW

## 11.2 MARKET EVALUATION FRAMEWORK

### TABLE 203 OVERVIEW OF STRATEGIES DEPLOYED BY KEY LEAK DETECTION OEMS

#### 11.2.1 PRODUCT PORTFOLIO

#### 11.2.2 REGIONAL FOCUS

#### 11.2.3 MANUFACTURING FOOTPRINT

#### 11.2.4 ORGANIC/INORGANIC GROWTH STRATEGIES

### FIGURE 41 HISTORICAL REVENUE ANALYSIS OF LEADING PLAYERS (2015–2019)

### FIGURE 41 HISTORICAL REVENUE ANALYSIS OF LEADING PLAYERS (2015–2019)

### 11.4 MARKET RANKING ANALYSIS: LEAK DETECTION MARKET FOR OIL & GAS, 2019

### TABLE 204 RANKING ANALYSIS OF LEAK DETECTION MARKET FOR OIL & GAS, 2019

### 11.5 MARKET SHARE ANALYSIS: LEAK DETECTION MARKET FOR OIL & GAS, 2019

### FIGURE 42 SHARE OF TOP 5 PLAYERS IN LEAK DETECTION MARKET FOR OIL & GAS IN 2019

## 11.6 COMPANY EVALUATION MATRIX

#### 11.6.1 STAR

#### 11.6.2 EMERGING LEADER

#### 11.6.3 PERVASIVE

#### 11.6.4 PARTICIPANT

### FIGURE 43 COMPANY EVALUATION MATRIX, 2019

### FIGURE 44 PRODUCT FOOTPRINT ANALYSIS OF TOP PLAYERS

## 11.7 START-UP EVALUATION MATRIX

#### 11.7.1 PROGRESSIVE COMPANY

#### 11.7.2 RESPONSIVE COMPANY

#### 11.7.3 DYNAMIC COMPANY

#### 11.7.4 STARTING BLOCK

### FIGURE 45 START-UP (SME) EVALUATION MATRIX, 2019

## 11.8 KEY MARKET DEVELOPMENTS

#### 11.8.1 PRODUCT LAUNCHES

### TABLE 205 PRODUCT LAUNCHES, JANUARY 2019– OCTOBER 2020

#### 11.8.2 PARTNERSHIPS AND CONTRACTS

### TABLE 206 PARTNERSHIPS AND CONTRACTS, JANUARY 2019– OCTOBER 2020

#### 11.8.3 MERGERS AND ACQUISITIONS

### TABLE 207 MERGERS AND ACQUISITIONS, JANUARY 2018– OCTOBER 2020

#### 11.8.4 EXPANSIONS

TABLE 208 EXPANSIONS, 2018

### 12 COMPANY PROFILES

#### 12.1 INTRODUCTION

(Business Overview, Products/solutions/services Offered, Recent Developments, COVID-19-related developments, SWOT Analysis, and MnM View (Key strengths/Right to win, Strategic choices made, Weakness and threats))\*

#### 12.2 KEY PLAYERS

##### 12.2.1 HONEYWELL INTERNATIONAL INC.

FIGURE 46 HONEYWELL INTERNATIONAL INC.: COMPANY SNAPSHOT

##### 12.2.2 EMERSON ELECTRIC CO.

FIGURE 47 EMERSON ELECTRIC CO.: COMPANY SNAPSHOT

##### 12.2.3 ABB

FIGURE 48 ABB: COMPANY SNAPSHOT

##### 12.2.4 KROHNE GROUP

##### 12.2.5 PSI SOFTWARE AG

FIGURE 49 PSI SOFTWARE AG: COMPANY SNAPSHOT

##### 12.2.6 ATMOS

##### 12.2.7 AVEVA

FIGURE 50 AVEVA: COMPANY SNAPSHOT

##### 12.2.8 FLIR SYSTEMS INC.

FIGURE 51 FLIR SYSTEMS INC.: COMPANY SNAPSHOT

##### 12.2.9 HIMA

##### 12.2.10 YOKOGAWA ELECTRIC CORPORATION

FIGURE 52 YOKOGAWA ELECTRIC CORPORATION: COMPANY SNAPSHOT

#### 12.3 OTHER KEY PLAYERS

##### 12.3.1 ASEL-TECH

##### 12.3.2 BRIDGER PHOTONICS

##### 12.3.3 FLYSCAN SYSTEMS

##### 12.3.4 FOTECH GROUP

##### 12.3.5 HAWK MEASUREMENT SYSTEMS

##### 12.3.6 MAGNUM

##### 12.3.7 MSA SAFETY

##### 12.3.8 OPTASENSE LTD.

##### 12.3.9 SIMULATION SOFTWARE LTD.

##### 12.3.10 TTK

\*Details on Business Overview, Products/solutions/services Offered, Recent

Developments, COVID-19-related developments, SWOT Analysis, and MnM View (Key strengths/Right to win, Strategic choices made, Weakness and threats) might not be captured in case of unlisted companies.

## **13 APPENDIX**

13.1 DISCUSSION GUIDE

13.2 KNOWLEDGE STORE: MARKETSANDMARKETS' SUBSCRIPTION PORTAL

13.3 AVAILABLE CUSTOMIZATIONS

13.4 RELATED REPORTS

13.5 AUTHOR DETAILS

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