The Chemical, Biological, Radiological, and Nuclear (CBRN) Defense Market 2013-2023

Description: This report is the result of extensive market and company research covering the global CBRN defense industry. It provides detailed analysis of both historic and forecast global industry values, factors influencing demand, the challenges faced by industry participants, analysis of the leading companies in the industry, and key news.

Why was the report written?

'The Global CBRN Defense Market 2013-2023' offers the reader detailed analysis of the global CBRN defense market over the next ten years, alongside potential market opportunities to enter the industry, using detailed market size forecasts.

What are the key drivers behind recent market changes?

The global CBRN defense market is estimated to value US$9 billion in 2013. The market consists of CBRN protection, detection, decontamination, disposal, and simulation equipment, and is expected to witness a marginal increase during the forecast period, primarily due to modernization initiatives planned in North America and Europe, and threats from terrorism and hostile neighboring countries in the Asia Pacific and Middle Eastern regions. The market is expected to increase at a CAGR of 4.2% during the forecast period, to reach US$13.7 billion by 2023. CBRN protection equipment is expected to account for the majority of the global CBRN defense market, followed by detection and decontamination systems.

What makes this report unique and essential to read?

'The Global CBRN Defense Market 2013-2023' provides detailed analysis of the current industry size and growth expectations from 2013 to 2023, including highlights of key growth stimulators. It also benchmarks the industry against key global markets and provides detailed understanding of emerging opportunities in specific areas.

Key Features and Benefits

The report provides detailed analysis of the market for CBRN defense equipment during 2013-2023, including the factors that influence why countries are investing or cutting defense expenditure. It provides detailed expectations of growth rates and projected total expenditure.

Despite a number of developed countries, mostly in Europe, having called for a complete shutdown of nuclear reactors in all countries around the world, global nuclear energy generation is expected to increase significantly over the forecast period. Rapidly increasing demand for electricity, along with increasing fossil fuel prices, are making nuclear power an increasingly attractive option for many countries, especially in those where large-scale alternative energy generation such as wind and solar are not feasible. It has also been reported that over 60 power reactors are currently being constructed in 13 countries including Turkey, Taiwan, China, South Korea, Poland, Bangladesh, Russia, the UAE, and India. All of these countries will have to spend on CBRN incident protection in order to ensure that tragedies such as the Fukushima spillover are avoided.

Key Market Issues

One of the key issues facing the industry is to develop technically advanced and cost effective prototypes that can be transferred to mass production without much difficulty. The major impact is currently felt in developing advanced protective suits that need to counter changing threats while at the same time being light so as to minimize the physical load on the wearer. Specifically, companies are trying to address the heat load stress issue by aiming for a balance between a generic outfit and a highly technological garment. These innovations require significant funding and with the global economy just emerging from the economic crisis and defense budgets being cut, companies are hard pressed to get the required funding.
Since the CBRN protection industry is currently in its nascent stage, it requires considerable funding from the public and private sectors to develop effective counter measures against potential threats. However, recent years have witnessed various instances of neglect towards the CBRN sector; cancelled programs, cutbacks in research funding, and a focus on other defense sectors threaten to plague the industry. In 2004, the US Congress passed the Project BioShield Act in a bit to get the private sector to develop medical countermeasures against CBRN terrorism agents and to provide a mechanism for the government to acquire these countermeasures.

Key Highlights

One of the main factors resulting in continuous demand for CBRN protection, detection, and decontamination equipment is the dual use of these agents in everyday life. The advancement in the fields of biotechnology, nuclear energy, and life sciences has the potential to bring about significant benefits for the betterment of mankind; however, these developments can also be used for hostile purposes and to perpetrate various instances of bio-terrorism, which is why it is imperative for scientists and the security community to constantly engage with each other and devise methods to prevent or counter any forms of CBRN terrorism.

Budget cuts are expected to prompt DoDs to provide war fighters and first responders with products already on the market or about to hit the market. These budget constraints are also expected to encourage the modification and refit of existing technologies and equipment in order to enhance the capabilities of CBRN defense forces while maintaining low budgets. As has been seen in the case of the US, the UK, and Japan, budget constraints have urged procurement departments to opt for dual use COTS products, which enables defense departments to save costs while at the same time provides CBRN defense personnel with equipment that offers a range of flexibility to meet multiple scenarios and requirements.

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