Visiongain expects an increase in EOR activities over the next decade, with Statoil likely to set up pilot chemical EOR projects over the next few years. BP currently operates a miscible gas EOR project at the Ula field. CO2 EOR is unlikely to be economically viable over the next decade although small pilot projects may be set up. This may therefore impact growth in the offshore decommissioning market in Norway.

**Figure 4.24 Norwegian Total Oil Production (1980-2012), Proved Reserves (1980-2013) and Estimated Petroleum Net Exports (1980-2012)**

Source: EIA, 2013

**4.4.3.5 The Restrictions of Limited Experience**

As is the case throughout the North Sea, the Norwegian sector has limited experience with decommissioning. Although consents for production are expiring, very few decommissioning projects have been undertaken. Experience can be shared from some large decommissioning projects, such as Frigg, Ekofisk, Odin, Froy and TOGI, but skills, supply chain and experience is still relatively immature, and as such will have a restraining impact over the Norwegian North Sea offshore decommissioning market in the coming years.
The Offshore Oil and Gas Decommissioning Market 2013-2023

Table 4.45 Asia-Pacific Offshore Oil and Gas Decommissioning Market Forecast 2013-2023 ($m, AGR %)

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<td>$m</td>
<td>388</td>
<td>404</td>
<td>436</td>
<td>479</td>
<td>537</td>
<td>617</td>
<td>722</td>
<td>867</td>
<td>1,040</td>
<td>1,238</td>
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<td>4.0</td>
<td>8.0</td>
<td>10.0</td>
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<td>20.0</td>
<td>19.0</td>
<td>16.0</td>
<td>15.0</td>
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</table>

Source: Visiongain 2013

Table 4.46 Asia-Pacific Offshore Oil and Gas Decommissioning Market Forecast CAGR (%) 2013-2023, 2013-2018, and 2018-2023

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<tr>
<td>CAGR (%)</td>
<td>15.1</td>
<td>12.4</td>
<td>18.0</td>
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Source: Visiongain 2013

Figure 4.27 Asia-Pacific Offshore Oil and Gas Decommissioning Market Forecast 2013-2023 ($m)

Source: Visiongain 2013
6. Expert Opinion

6.1 Mactech Inc.

Mactech Inc. is a market leader in on-site machining services as well as being a specialist in offshore decommissioning and supplier of the machinery required for these tough environments. Visiongain spoke to Mr. Wittenbraker in October 2013 and thanks him for his contribution to the report.

6.1.1 Mactech’s Role and Experience in the Offshore Decommissioning Industry

Visiongain: Can you tell me about Mactech, Inc. and your role in the offshore decommissioning industry?

Joel Wittenbraker: Mactech, Inc. dates back to the mid 1970’s and since the 1980’s we have been designing and building speciality in-situ machine tools and portable machine apparatus. Additionally we repair and dismantle the products, principally on land. Our role in the offshore decommissioning business is as tools specialists. Organisations that knew of our products for cutting pipe approached us post-Hurricane Katrina to see if we could help bring some tools to the market in order to complete some of the subsea decommissioning and abandonment work and if we could take an active view of improving some of the tools and methodologies that were being used. That was around six to nine months after Hurricane Katrina, as the hurricane recovery work was really starting to take hold.

Visiongain: Predominantly, where are your clients and projects based?

Joel Wittenbraker: Most of our work, historically, has been in the Gulf of Mexico and most of our customer base is there. They are either owners of the development land and production platforms or contractors - the service teams who have a contract to take out a structure. But that is not to say we have not worked in a lot more places. We have been invited to Norway, we have been to Nigeria and the Middle East a couple of times, and we have quite a bit of activity brewing in Australia and South East Asia. Most of our work in those regions has been obtained through our relationships with contractors or specialists in the Gulf of Mexico market. Together we are being called to deal with a situation somewhere else in the world.
7. Leading Companies in the Offshore Oil and Gas Decommissioning Market

There are hundreds of companies who either possess offshore oil and gas assets that will need to be decommissioned over the next decade, or who provide consultancy, engineering and other services to the decommissioning industry. Therefore, the following list of companies is by no means exhaustive. Companies have been broken down into three groups: oil and gas companies with offshore assets; decommissioning contractors; and decommissioning consultancies.

7.1 Oil and Gas Companies with Offshore Assets

The following is a list of major energy companies with oil and gas assets in the Gulf of Mexico, North Sea and Asia-Pacific regions who are likely to carry out decommissioning projects over the next ten years.

7.1.1 Apache Corporation

Headquarters: Houston, Texas, US
Apache Corporation is an American independent oil and gas corporation with regional offices and operations in the United States, Argentina, Australia, Canada, Egypt and UK North Sea. The company has 57 years of experience in the oil and gas industry and today employs around 5,300 people.

The company owns a number of assets in the Gulf of Mexico that have been idle for five years or more and therefore has to decommission these assets in accordance with the Idle Iron NTL of 2010. They are thought to be one of the largest spenders on offshore decommissioning in the Gulf of Mexico. The company also has offshore assets in the North Sea and the Asia-Pacific region that will likely be decommissioned over the next ten years. In 2011 Apache carried out a decommissioning project at the Legendre field off the west coast of Australia.

7.1.2 BP

Headquarters: London, UK
BP is a global oil and gas company headquartered in London, UK, and is one of the six energy supermajors. The company employs almost 86,000 people around the world.