

海洋におけるエネルギー・鉱物資源の開発

- 「海洋基本計画」※1を踏まえ、「海洋エネルギー・鉱物資源開発計画」を策定し※2、メタンハイドレート、海底熱水鉱床の商業化までの道筋、必要な技術開発等を具体的に明示。

※1 平成20年3月閣議決定。なお、平成24年度中に見直しが行われる予定。

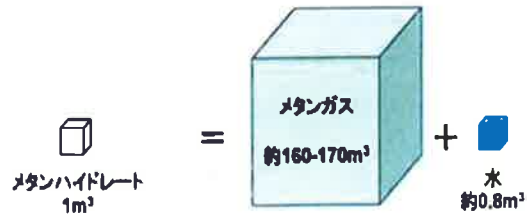
※2 平成21年3月:総合海洋政策本部了承

	石油・天然ガス	メタンハイドレート
計画の概要 (ポイント)	<p>①三次元物理探査船『資源』を活用し、資源探査を拡充。</p> <ul style="list-style-type: none"> ➢毎年 約6,000km²の探査を実施 ➢平成30年度までに約6.2万km²を探査予定 (平成23年度までに約18,895km²の海域において三次元物理探査を実施。) <p>②探査で判明した有望海域について、試掘(ボーリング)を実施。</p> <ul style="list-style-type: none"> ➢平成25年4月に佐渡南西沖にて実施予定 	<p>①日本近海における「海洋産出試験」を計画。</p> <ul style="list-style-type: none"> ➢平成25年1月に東部南海トラフ海域にて実施予定 <p>②平成30年度を目途に、商業化に向けた技術の整備を実施。</p>
賦存・分布場所	<ul style="list-style-type: none"> ・水深数百m～2,000m程度の海底下数千m。 	<ul style="list-style-type: none"> ・水深1,000m以深の海底下約数百m。

メタンハイドレートとは何か？



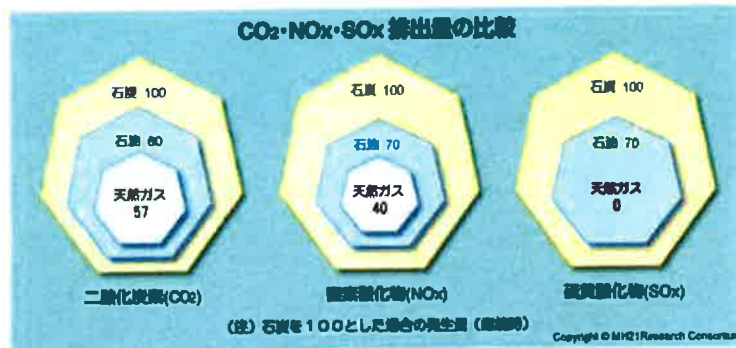
- **固体物質** : メタンガスと水が低温・高圧の状態では結晶化した氷状の物質。



- ◆ メタンハイドレート(MH)はメタンと水によって構成されているため、火を近づけるとメタンが燃え、水が残る。
- ◆ メタンハイドレート1m³には、約160～170倍の体積のメタンガスが含まれている。

- **将来のクリーンエネルギー資源として期待** :

- ① メタンガス(天然ガスの主成分)は、石油や石炭に比べ燃焼時の二酸化炭素排出量が少ない。
- ② 大水深海底下や極地の凍土層下の地層に広く存在し、日本でも「東部南海トラフ海域」に大規模な賦存が推定。



BSRとは地震探査で観測される海底疑似反射面の略で、メタンハイドレートの存在を示す指標として用いられる。



- **新たな生産技術の開発が必要** :

メタンハイドレートは地中に固体で存在するため、在来型の石油・天然ガスとは異なり、井戸を掘っても自噴しない。

石油・天然ガスを対象とした基礎調査・基礎試錐について

新潟県佐渡南西沖で石油・天然ガス資源ポテンシャルを発見

- 平成20年2月以降、経済産業省所有の公船である「資源」(三次元物理探査船)を導入し、海域調査を本格的に実施。その結果、新潟県佐渡南西沖において石油・天然ガス資源ポテンシャルを発見。
- 平成25年4～6月、「資源」導入後初となる試掘調査を実施予定。

平成19年度～平成23年度調査地域



注：
複数年度にまたがる調査もある。
また、位置は、おおよそのもの。
調査エリアを示すものではない。

試掘実施候補地



掘削場所：新潟県佐渡南西沖(約30km)
委託先：JX日鉱日石開発(株)/JOGMEC

2013年1月21日 オバマ大統領就任演説より抜粋

The path towards sustainable energy sources will be long and sometimes difficult. But America cannot resist this transition, we must lead it. We cannot cede to other nations the technology that will power new jobs and new industries, we must claim its promise. That's how we will maintain our economic vitality and our national treasure -- our forests and waterways, our crop lands and snow-capped peaks. That is how we will preserve our planet, commanded to our care by God. That's what will lend meaning to the creed our fathers once declared.

持続可能なエネルギー資源への道のりは長く、時に困難になるだろう。

しかし、米国はこの変遷に逆らうことはできないし、我々が主導していかなければならない。新たな雇用や新産業を生み出す技術を他国に譲ることはできない。それを主張すべきだ。それが我々の経済活力や、米国の宝である森林や河川、耕作地や雪に覆われた峰々を維持していくことになる。神が我々に命じた通りに、地球を保全していく。それは我々の父祖が宣言した信念に沿ったものだ。

平成25年2月21日 予算委員会 生活の党 森ゆうこ

(新聞報道等により、森ゆうこ事務所作成)

and research labs that will bring new jobs and businesses to our shores. Now, more than ever, we must do these things together, as one nation and one people. (Applause.)

This generation of Americans has been tested by crises that steeled our resolve and proved our resilience. A decade of war is now ending. (Applause.) An economic recovery has begun. (Applause.) America's possibilities are limitless, for we possess all the qualities that this world without boundaries demands: youth and drive; diversity and openness; an endless capacity for risk and a gift for reinvention. My fellow Americans, we are made for this moment, and we will seize it -- so long as we seize it together. (Applause.)

For we, the people, understand that our country cannot succeed when a shrinking few do very well and a growing many barely make it. (Applause.) We believe that America's prosperity must rest upon the broad shoulders of a rising middle class. We know that America thrives when every person can find independence and pride in their work; when the wages of honest labor liberate families from the brink of hardship. We are true to our creed when a little girl born into the bleakest poverty knows that she has the same chance to succeed as anybody else, because she is an American; she is free, and she is equal, not just in the eyes of God but also in our own. (Applause.)

We understand that outworn programs are inadequate to the needs of our time. So we must harness new ideas and technology to remake our government, revamp our tax code, reform our schools, and empower our citizens with the skills they need to work harder, learn more, reach higher. But while the means will change, our purpose endures: a nation that rewards the effort and determination of every single American. That is what this moment requires. That is what will give real meaning to our creed.

We, the people, still believe that every citizen deserves a basic measure of security and dignity. We must make the hard choices to reduce the cost of health care and the size of our deficit. But we reject the belief that America must choose between caring for the generation that built this country and investing in the generation that will build its future. (Applause.) For we remember the lessons of our past, when twilight years were spent in poverty and parents of a child with a disability had nowhere to turn.

We do not believe that in this country freedom is reserved for the lucky, or happiness for the few. We recognize that no matter how responsibly we live our lives, any one of us at any time may face a job loss, or a sudden illness, or a home swept away in a terrible storm. The commitments we make to each other through Medicare and Medicaid and Social Security, these things do not sap our initiative, they strengthen us. (Applause.) They do not make us a nation of takers; they free us to take the risks that make this country great. (Applause.)

We, the people, still believe that our obligations as Americans are not just to ourselves, but to all posterity. We will respond to the threat of climate change, knowing that the failure to do so would betray our children and future generations. (Applause.) Some may still deny the overwhelming judgment of science, but none can avoid the devastating impact of raging fires and crippling drought and more powerful storms.

The path towards sustainable energy sources will be long and sometimes difficult. But America cannot resist this transition, we must lead it. We cannot cede to other nations the technology that will power new jobs and new industries, we must claim its promise. That's how we will maintain our economic vitality and our national treasure -- our forests and waterways, our crop lands and snow-capped peaks. That is how we will preserve our planet, commanded to our care by God. That's what will lend meaning to the creed our fathers once declared.

We, the people, still believe that enduring security and lasting peace do not require perpetual war. (Applause.) Our brave men and women in uniform, tempered by the flames of battle, are unmatched in skill and courage. (Applause.) Our citizens, seared by the memory of those we have lost, know too well the price that is paid for liberty. The knowledge of their sacrifice will keep us forever vigilant against those who would do us harm. But we are also heirs to those who won the peace and not just the war; who turned sworn enemies into the surest of friends -- and we must carry those lessons into this time as well.

We will defend our people and uphold our values through strength of arms and rule of law. We will show the courage to try and resolve our differences with other nations peacefully -- not because we are naïve about the dangers we face, but because engagement can more durably lift suspicion and fear. (Applause.)

America will remain the anchor of strong alliances in every corner of the globe. And we will renew those institutions that extend our capacity to manage crisis abroad, for no one has a greater stake in a peaceful world than its most powerful nation. We will support democracy from Asia to Africa, from the Americas to the Middle East, because our interests and our conscience compel us to act on behalf of those who long for freedom. And we must be a source of hope to the poor, the sick, the marginalized, the victims of prejudice -- not out of mere charity, but because peace in our time requires the constant advance of those principles that our common creed describes: tolerance and opportunity, human dignity and justice.

We, the people, declare today that the most evident of truths -- that all of us are created equal -- is the star that guides us still; just as it guided our forebears through Seneca Falls, and Selma, and Stonewall, just as it guided all those men and women, sung and unsung, who left footprints along this great Mall, to hear a preacher say that we cannot walk alone; to hear a King proclaim that our individual freedom is inextricably bound to the freedom of every soul on Earth. (Applause.)

It is now our generation's task to carry on what those pioneers began. For our journey is not complete until our wives, our mothers and daughters can earn a living equal to their efforts. (Applause.) Our journey is not complete