

# SENATE RESOLUTION No. 146

## STATE OF NEW JERSEY 218th LEGISLATURE

INTRODUCED JUNE 20, 2019

**Sponsored by:**

**Senator JOSEPH PENNACCHIO**

**District 26 (Essex, Morris and Passaic)**

**Co-Sponsored by:**

**Senator A.R.Bucco**

**SYNOPSIS**

Urges Congress and President to increase funding for fusion energy research.

**CURRENT VERSION OF TEXT**

As introduced.



(Sponsorship Updated As Of: 6/28/2019)

1    **A SENATE RESOLUTION** urging Congress and the President to  
2       increase funding for fusion energy research.  
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4    **WHEREAS**, Nuclear fusion is a method of producing energy by fusing  
5       atoms of one or more elements together to create atoms of another  
6       element; and  
7    **WHEREAS**, Fusion requires temperatures of 150,000,000 degrees  
8       Celsius, so successfully containing a fusion reaction has proven to  
9       be a substantial engineering challenge; and  
10   **WHEREAS**, Fusion promises to be a sustainable source of energy  
11       which is environmentally benign, producing neither atmospheric  
12       pollutants nor long-term radioactive waste; and  
13   **WHEREAS**, Energy generation from fusion may result in improved  
14       global political stability, since it would represent an inexpensive,  
15       long-term energy source; and  
16   **WHEREAS**, New Jersey is a leader in fusion energy research, and it is  
17       home to the Princeton Plasma Physics Laboratory (PPPL), one of  
18       the foremost centers for fusion energy research in the world; and  
19   **WHEREAS**, The PPPL currently houses one of the most powerful  
20       electromagnets in the world, which is needed to contain the high-  
21       temperature plasma that allows for fusion, and the design of the  
22       PPPL is currently thought to be the top contender for practical  
23       fusion energy production; and  
24   **WHEREAS**, Advancing fusion research is not only important because  
25       of its direct applications, it also requires the development of new  
26       technologies and materials that have unexpected beneficial  
27       applications in other fields; and  
28   **WHEREAS**, There is also a growing interest in fusion from the private  
29       sector, and increased funding for public-private partnership  
30       ventures could lead to economic benefits to the State; and  
31   **WHEREAS**, The International Thermonuclear Experimental Reactor  
32       (ITER) – which, when completed, will be the world's largest  
33       magnetic confinement plasma physics experiment – is currently  
34       under construction in France, and needs continued financial support  
35       from the United States government in order to become operational;  
36       and  
37   **WHEREAS**, Congress should increase its appropriations to the Fusion  
38       Energy Sciences program in the Department of Energy, in order to  
39       support the PPPL, ITER, as well as private enterprises pursuing this  
40       promising and potentially revolutionary technology; now, therefore,  
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42       **BE IT RESOLVED** *by the Senate of the State of New Jersey:*  
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44       1. This House urges Congress and the President to increase  
45       funding for fusion energy research, in order to facilitate the  
46       development of this promising energy source.

**SR146 PENNACCHIO**

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1       2. Copies of this resolution, as filed with the Secretary of State,  
2 shall be transmitted by the Secretary of the Senate to the President  
3 of the United States, the Majority and Minority Leaders of the  
4 United States Senate, the Speaker and Majority and Minority  
5 Leaders of the United States House of Representatives, and each  
6 member of the United States Congress elected from this State.

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**STATEMENT**

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11       This resolution urges Congress and the President to increase  
12 funding for fusion energy research. Fusion promises to be an  
13 inexpensive, sustainable, and environmentally friendly source of  
14 energy, and facilitating its development could produce great  
15 economic and environmental benefits for the country. In addition,  
16 New Jersey is home to the Princeton Plasma Physics Laboratory  
17 (PPPL), one of the foremost centers for fusion energy research in  
18 the world.