

## “THE POLAR BEAR'S HABITAT DECREASE: CAUSES AND SOLUTIONS”

### ODS (12, 13 e 15)

Ana Livia Elisiario - aluno (Colégio CEMI Taubaté)  
Miguel Fernandes e Andrade - aluno (Colégio CEMI Taubaté)  
Joao Victor Rabelo Duarte - aluno (Colégio CEMI Taubaté)  
Nelson Gouvea dos Santos - aluno (Colégio CEMI Taubaté)  
Cecilia Siqueira Coura - aluno (Colégio CEMI Taubaté)  
Bernardo Kako Dominoni - aluno (Colégio CEMI Taubaté)  
Thalita Rafaela Squarcini Dias de Moraes - professora (Colégio CEMI Taubaté)

This project, aligned with the United Nations Sustainable Development Goal 13 - Climate Action, presents the effects of climate change on polar bear (*Ursus maritimus*) populations in the Arctic. Polar bears are facing challenges from declining ice sea. Accelerated ice melting caused by global warming is making polar bear's hunting, resting and reproduction decrease, resulting in their habitat loss, especially among weaker individuals. The project was developed with students from 3rd to 5th grade in a bilingual (Portuguese-English) learning context and the methodology included reading lessons, documentaries, guided discussions, collaborative construction of a sustainable model using Lego, and a hands-on experiment demonstrating the effect of heat absorption on ice melting. CLIL (Content and Language Integrated Learning) methodology was also applied during the development of the project during the bilingual lessons, also increasing their vocabulary and other skills. 3Rs (Recycle, Reduce and Reuse) practices, reforestation and the use of renewable energy sources are emphasized as solutions, so bilingual students from 3rd to 5th grade are developing their oral skills by presenting their environmental awareness work in both languages. This project also aims to develop critical thinking, scientific communication skills and environmental responsibility, while raising awareness of the urgent need for global actions to mitigate climate change, protect biodiversity, and preserve polar bear habitats for future generations.

**Palavras-chave:** Climate Change; Polar Bear Habitat; Global Warming; Sustainable Solutions.