

## Using *Climateprediction.net* with IB Diploma Programme *Physics* Topic 8: Energy, power and climate change

### Introduction

The *climateprediction.net* project links with several sections of Topic 8: Energy, power and climate change. It provides particular support for 8.5 Greenhouse effect and 8.6 Global warming and helps to promote aim 7, aim 8, TOK and the international dimension.

### Relevant resources on the *climateprediction.net* site

- Online resource for climate prediction. This presentation gives a basic introduction to climate prediction including a short quiz that tests understanding of climate change. It is aimed at 11 - 16 year old students but would be suitable as a first introduction to the topic.
- An introduction to climate prediction and modelling the Earth's energy balance:  
[http://www.climateprediction.net/schools/docs/KS5\\_lessonplan.pdf](http://www.climateprediction.net/schools/docs/KS5_lessonplan.pdf)  
[http://www.climateprediction.net/schools/docs/KS5\\_intro.pdf](http://www.climateprediction.net/schools/docs/KS5_intro.pdf)  
[http://www.climateprediction.net/schools/docs/KS5\\_intro.ppt](http://www.climateprediction.net/schools/docs/KS5_intro.ppt)  
[http://www.climateprediction.net/schools/docs/climatemodel\\_instructions.pdf](http://www.climateprediction.net/schools/docs/climatemodel_instructions.pdf)  
[http://www.climateprediction.net/schools/docs/climate\\_model\\_worksheet.xls](http://www.climateprediction.net/schools/docs/climate_model_worksheet.xls)  
[http://www.climateprediction.net/schools/docs/climatemodel\\_excel\\_extension.pdf](http://www.climateprediction.net/schools/docs/climatemodel_excel_extension.pdf)  
[http://www.climateprediction.net/schools/docs/climate\\_model\\_paper.pdf](http://www.climateprediction.net/schools/docs/climate_model_paper.pdf)  
[http://www.climateprediction.net/schools/docs/climate\\_model\\_teachersnotes.pdf](http://www.climateprediction.net/schools/docs/climate_model_teachersnotes.pdf)
- How to join the *climateprediction.net* research project:  
[http://www.climateprediction.net/schools/schools\\_join.php](http://www.climateprediction.net/schools/schools_join.php)
- An analysis of recent results from *climateprediction.net*:  
[http://www.climateprediction.net/schools/docs/SPU\\_cpdn\\_results.pdf](http://www.climateprediction.net/schools/docs/SPU_cpdn_results.pdf)  
[http://www.climateprediction.net/schools/docs/SPU\\_cpdn\\_results\\_teachersnotes.pdf](http://www.climateprediction.net/schools/docs/SPU_cpdn_results_teachersnotes.pdf)
- The results of modelling different economic and social scenarios and their impact on carbon dioxide emissions and climate:  
[http://www.climateprediction.net/schools/emissions\\_development.php](http://www.climateprediction.net/schools/emissions_development.php)
- Powerpoint slideshow with questions on 'Why is carbon dioxide so important?'  
[http://www.climateprediction.net/schools/docs/correlation\\_causation.pdf](http://www.climateprediction.net/schools/docs/correlation_causation.pdf)  
[http://www.climateprediction.net/schools/docs/correlation\\_causation.ppt](http://www.climateprediction.net/schools/docs/correlation_causation.ppt)  
[http://www.climateprediction.net/schools/docs/correlation\\_causation\\_teachersnotes.pdf](http://www.climateprediction.net/schools/docs/correlation_causation_teachersnotes.pdf)
- A discussion exercise on Russia's Kyoto Protocol dilemma with relevant documents  
[http://www.climateprediction.net/schools/docs/Kyoto\\_Russia.pdf](http://www.climateprediction.net/schools/docs/Kyoto_Russia.pdf)