

Warfighter Climate Challenge Operations Order



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1. Situation:

Climate change poses significant risks to regional stability, national security, and military readiness. Your team has accepted the challenge to demonstrate how various sectors of society can work together to mitigate these risks. You will work with the En-ROADS simulation model (developed by Climate Interactive and MIT Sloan Sustainability Initiative) to create a scenario that can mitigate global warming to the internationally agreed target of less than 2°C. Global warming above this will cause dangerous and irreversible damage that will harm our prosperity, security, health, and lives. It is a benchmark by which scientists and world leaders believe we can lower the risks to a more manageable level. Your participation in this scientifically grounded, action-oriented, and eye-opening exercise will assist you in understanding and confronting climate change in the near-term and in your future as a military officer.

2. Mission

Warfighter Climate Challenge teams will utilize the [En-ROADS simulation tool](#) to create a scenario that can mitigate global warming to the internationally agreed upon target of less than 2°C, analyze how the scenario impacts regional stability, national security, and military readiness, determine what actions to take at a unit and personal level to support the proposal, develop lessons learned from the simulation experience and submit the proposal to a team of climate and security experts.

3. Execution:

A. Tasks

1. Remotely attend the Warfighter Climate Challenge launch/ OPORD Briefing on 10 Feb 21, or watch a recording of the launch found on the Warfighter Climate Challenge [Facebook page](#).

2. Form a team of 3- 5 cadets and create a scenario using the En-ROADS simulator to demonstrate your team's vision of how to successfully limit global warming to less than 2°C. Be realistic. i.e. Create a scenario of what could be possible if human civilization cooperates at its best. En-ROADS is a global model, which means that policy levers simulate applying various actions to the entire world. En-ROADS does not attempt to address the complex nuances of how

different countries and political groups might respond to each policy. It is solely focused on the physical science of the feasibility and impacts of each solution.

Review these materials to help you understand how to use the simulator.

- [One page guide to the En-ROADS policy levers](#)
- Introductory video to En-ROADS found on the Warfighter Climate Challenge [Facebook page](#).

3. Analyze the scenario to determine how the proposal would impact regional stability, national security, and military readiness.

4. Determine what actions to implement at the unit and personal level to support the scenario.

5. Submit the proposal IAW Paragraph 5, Command and Signal NLT 5 MAR 2021 via the [Warfighter Challenge submission link](#).

6. Remotely attend the Warfighter Climate Challenge After Action Review. The challenge winner and runner-up will be announced at this review.

7. Complete a post-mission execution survey.

B. End state: Participation in this challenge will foster important dialogue about climate change and its impact on regional stability, national security, and military readiness. It will serve as a stimulus to create a generation of climate-smart military officers with a better understanding of both the risks climate change poses to the US military and the opportunities available to mitigate these risks.

4. Service/Support

A. Timeline: A summary of the key dates follows:

10 Feb:	Warfighter Climate Challenge Launch
23 Feb:	En-ROADS Deep Dive and Q&A via Zoom
5 Mar:	Submissions Due
19 Mar:	Warfighter Climate Challenge After Action via Zoom Review and Awards Presentation via Zoom

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B. Evaluation/ Challenge Winner: All submissions be evaluated according to the following rubric:

- 20% Presentation: How well did the team explain the scenario?
- 20% Impact: How well did the team describe the impact of the proposal on regional stability, national security, and military readiness?
- 20% Realism: How realistic is the scenario?
- 20% Actions: How well do the team's unit level and personal actions relate to the proposal, and are the actions achievable?
- 20% Reflection: How insightful were the team's reflections?

The team with the highest score will receive a \$500 cash award.

C. Completion Incentive: All team members who successfully complete the challenge will receive a Warfighter Climate Challenge Certificate of Completion and a challenge coin or shoulder patch.

D. Resources: Follow us on [Facebook](#) for the latest updates and to ask questions as you attempt the challenge. You may also contact Warfighter_CC@uml.edu or challenge coordinators with any questions.

Challenge coordinators:

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E. Support for the Warfighter Climate Challenge: This challenge was made possible with the generous support of MIT Lincoln Laboratory, the University of Massachusetts, Lowell and Climate Interactive.

5. Command and Signal (Proposal submission format):

A. **Slide Presentation Format:** Formulate a 6-12 slide presentation addressing each of the sections outlined below:

Cover Slide: Include team name, date, and a photos/names of all team members.

Section 1: Proposal

- Provide a short, memorable name for your proposal.
- Paste a screenshot of the main En-ROADS interface showing your results
- Present bullet points summarizing your most important policies and outcomes
- Paste the text from Actions & Outcomes to document all the policy settings in your scenario. Access the “Actions & Outcomes” feature from the “View” menu.

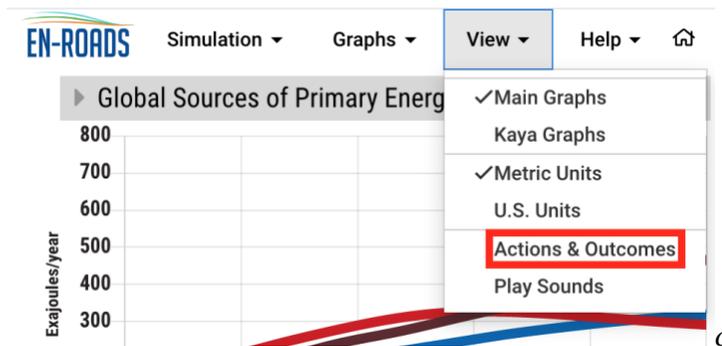


Figure 1: Actions & Outcomes

- Paste your URL from the “Copy scenario link” option in the Share Your Scenario feature on the top tool bar

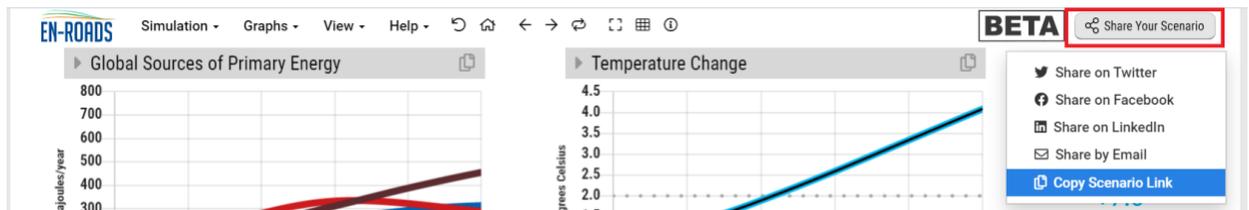


Figure 2: Copy scenario link

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- In section 1, you may choose to share additional screenshots of up to three specific graphs that caught your attention and are worth noting. For each graph you share, please briefly explain what it illustrates.

Section 2: Impacts Address two or more of the following:

- **Climate:** Does your proposal limit global warming to 2°C? If it does not meet the goal, why is this acceptable to you?
- **Regional stability:** How does your proposal impact regional stability?
- **National Security:** How does your proposal impact national security?
- **Military Readiness:** How does your proposal impact military readiness?

Section 3: Implementation How realistic is your proposal and what would it take to be implemented? What barriers might arise in the implementation of your proposals, and how might they be addressed? To get started, what actions and priorities are needed as soon as possible from the military, businesses, civil society, governments, or the public?

Section 4: Actions What can your team do at both the unit and personal level to support your proposal?

Section 5: Reflection (Address any or all the following)

- What surprised you about the behavior of the energy and climate system as captured in the simulation? For example, what actions had a bigger or smaller effect than you thought?
- What surprised you about how climate change impacts global stability, national security, and military readiness?
- What trends in the world give you hope that your proposals are possible?
- In general, what did you learn by completing the challenge?

Section 6: Contact Info

- Include name and email for all team members.
- Include mailing address for challenge coins.

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- B. **Video Recording.** Create a short recording, 6-12 minutes in length, summarizing your slide presentation. We recommend each team create a presentation and then record the narrated presentation as a video.
- C. **Submission:** Teams will receive an email with a link to upload their proposals. Proposals must be uploaded NLT 5 March 2021 using the following naming convention:

Presentation: teamname.pdf

Video: teamname.mov/.mp4/.wmv/.avi

**THANK YOU FOR YOUR PARTICIPATION IN THE 2021
WARFIGHTER CLIMATE CHALLENGE!**