

Official Document Submittal Instructions

Preliminary Device Performance Video

2021 ASME SDC

Harvesting the Sun and Wind Competition

ASME E-Fests information can be found at: efests.asme.org

The team captain from each team must submit (1) a 1st Performance Video and (2) a completed Competition Score Sheet using the link provided in the email sent by ASME to all registered participants. Please only send one video and one score sheet per team. The video is due by 11:59 pm (US EDT) April 2, 2021.

You must record each of the 8 steps below in the order listed.

Before starting video, place unloaded device in the Weight Loading Area, and all ½ kg steel plates on the ground near the Loading Area. Place weight verification scale on the ground near the Weight Unloading Area, and the energy sources you will use in their fixed position at the edge of the Charging Area (have them turned off, do not move once the demonstration starts).

1. Start the video with a recording of a sign with your school and device name, have the team captain/representative make an honor pledge that your entire team is following all competition rules and clarifications.

You have 5 minutes to operate your device for this demonstration.

Your video must be continuous – no pausing once you start the timer

2. Record your timer device being started, clearly state that you are beginning your 5 minutes. Then keep the video on the device for the entire duration of the recording as your team loads weights, drives to the unloading zone, and returns for either recharging or additional weights.
3. As you record your device passing over arrows state the total number of unique arrows crossed when you get to the loading area. ***Enter this score on the Competition Score Sheet (below).***
4. Record the weights being removed in the Weight Unloading Area. Immediately place the weights on your scale, video the scale reading and state the reading (in kg). ***Enter this score on the Competition Score Sheet.*** (Your device can continue being driven to the Loading Area while the scale reading is being recorded. After recording this, return to recording your device; all weights can also be manually returned to the Loading Area.)
5. For devices returning to the Weight Loading Area, reload weight(s) and repeat steps 3 and 4.
6. For devices going to the Charging Zone, turn on either/both Solar/Wind source(s) once your device is inside the Charging Zone. When your device leaves the Charging Zone turn off your energy source(s). Return to the Weight Loading Area, reload weight(s) and repeat steps 3 and 4.
7. If device loses power and becomes stranded, manually place device in the Charging Zone with all power sources turned off. Then record the timer running for ***15 seconds*** while your device remains untouched. Then show the charging source(s) being turned on and continue step 6.
8. When 5 minutes elapses, timing person should call out stop; record the timer showing 5 minutes.

Fill out and submit a copy of the Score Sheet (below) when you upload your video

Score Sheet for 2021 ASME Student Design Competition
Harvesting the Sun and Wind Competition

Video Date: _____

School: _____

Team Name: _____

Competition Score Sheet

Trip	Number of Arrows	Weight Carried (kg) (max is 5 kg)	Trip Score*
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
Total Score:			

* The Trip Score = (# of arrows crossed)*(weight carried to loading area)/10
(as per competition rules 10, 11 and 12)