2027 Kansas KidWind Challenge

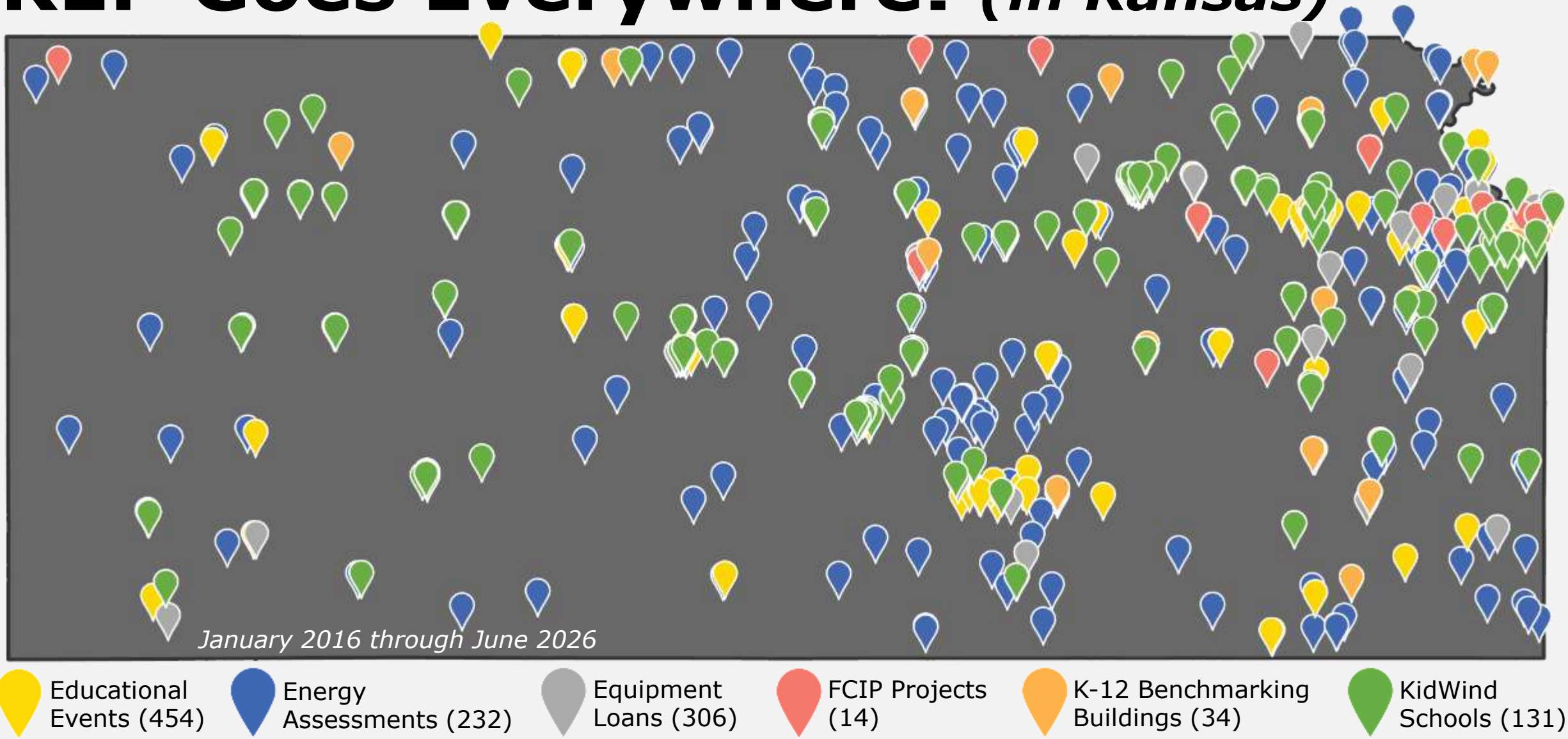
November 17, 2026 – Informational Webinar



We are part of Kansas State University Engineering Extension. The Kansas Energy Program (KEP) was established in 2016 through a partnership with the Kansas Corporation Commission Energy Office.

Kansas Corporation Commission

KEP Goes Everywhere! *(in Kansas)*



2026 Kansas KidWind Challenge Champions

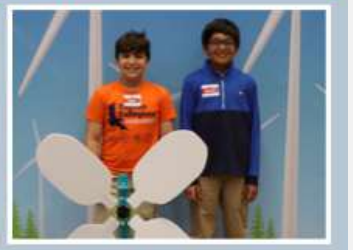
4th - 5th Grade • KidWind Generator Division



1st Allen STEM Magnet School
Whirlwinds



2nd place - Prairie Ridge Elementary
Untied Shoelaces



3rd place - Topeka Collegiate School
Topeka Collegiate Team 3

6th - 8th Grade • KidWind Generator Division



1st place - Allen STEM Magnet School
Mavericks



2nd place - Nemaha Central Elementary/MS
WINders



3rd place - Paola Middle School
Solar Flares

9th - 12th Grade • KidWind Generator Division



1st place - Inman High School
Trade Winds



2nd place - Inman High School
Wonderful Winders



3rd place - Paola High School
Torus

6th - 8th Grade

Homebuilt Generator	Open Generator



1st place - Kepley Middle School
Wind Warriors



1st place - Oakley Middle School
Twister Sisters

9th - 12th Grade

Homebuilt Generator	Open Generator



1st place - Burlington High School
Burlington Wind Co - Yin Yang



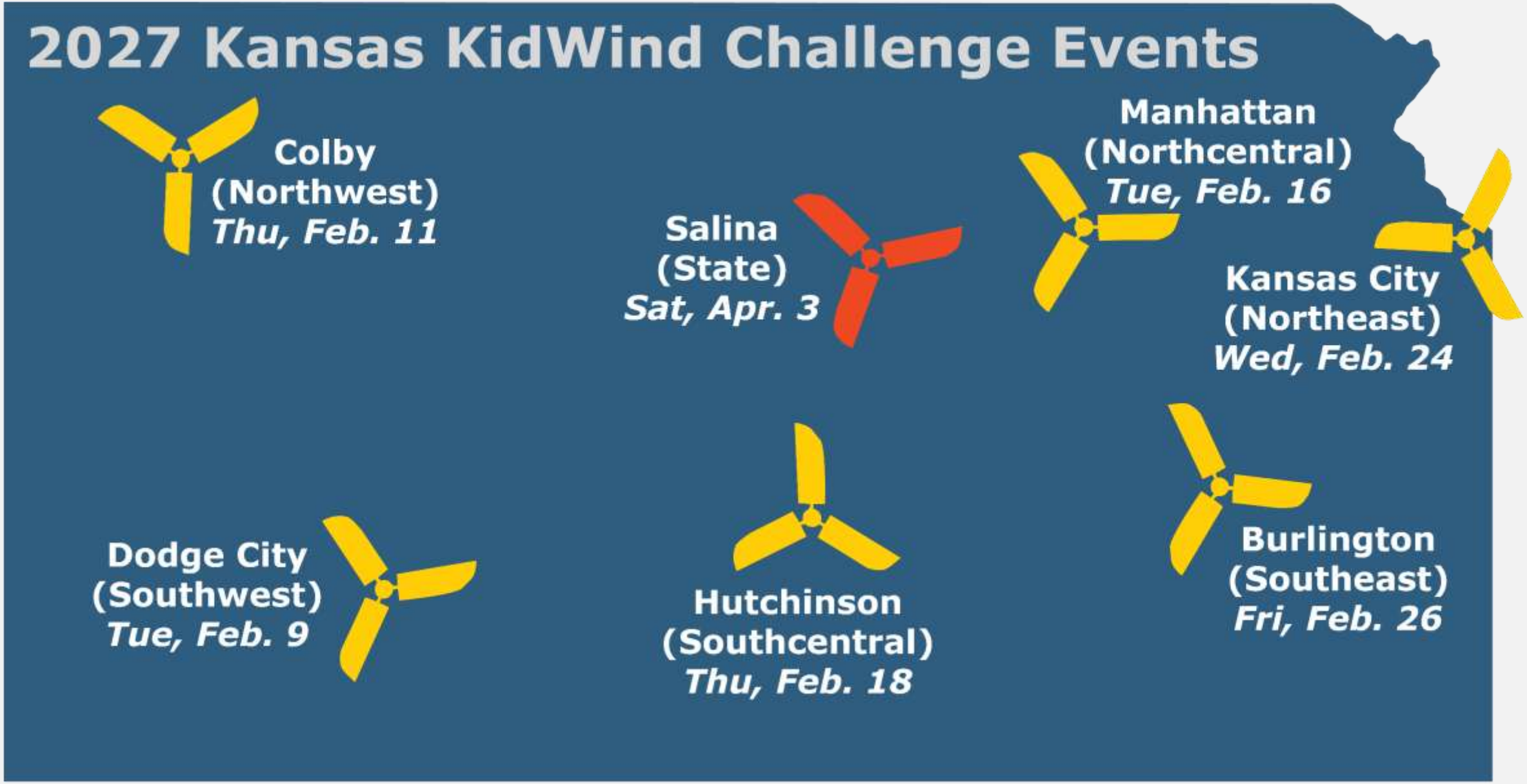
1st place - Oakley High School
Spirit Winds

2026 World Champions from Kansas

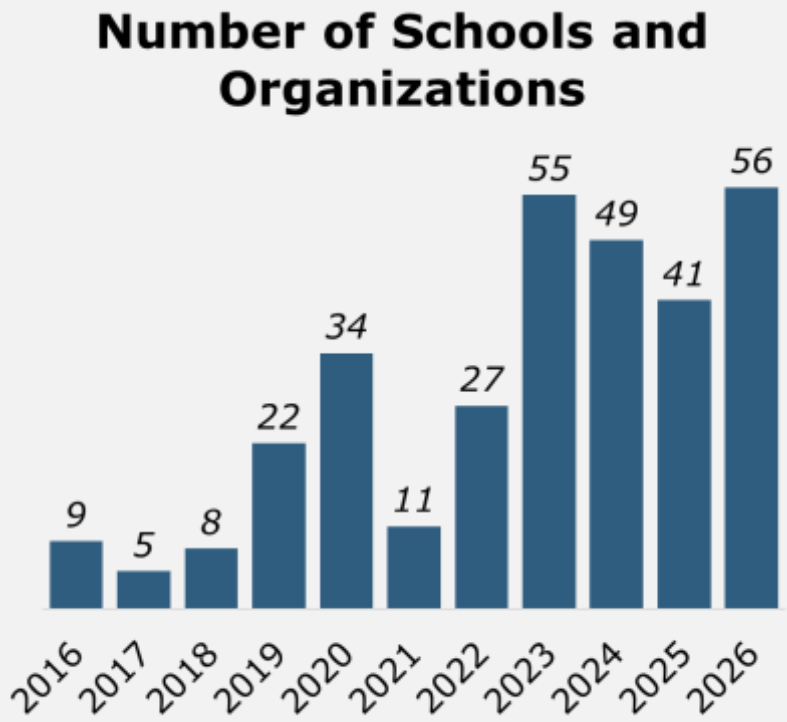


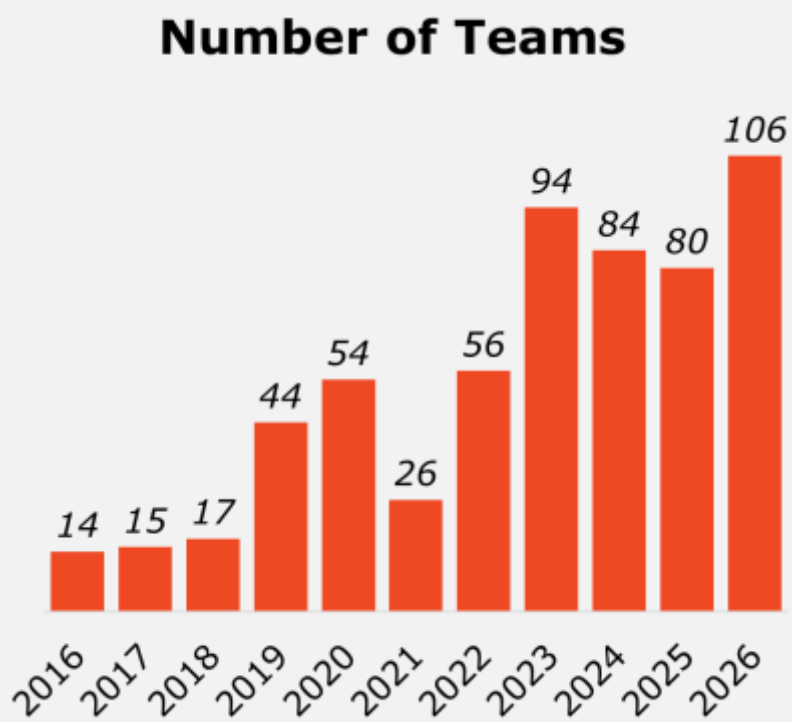
2027 World KidWind Challenge

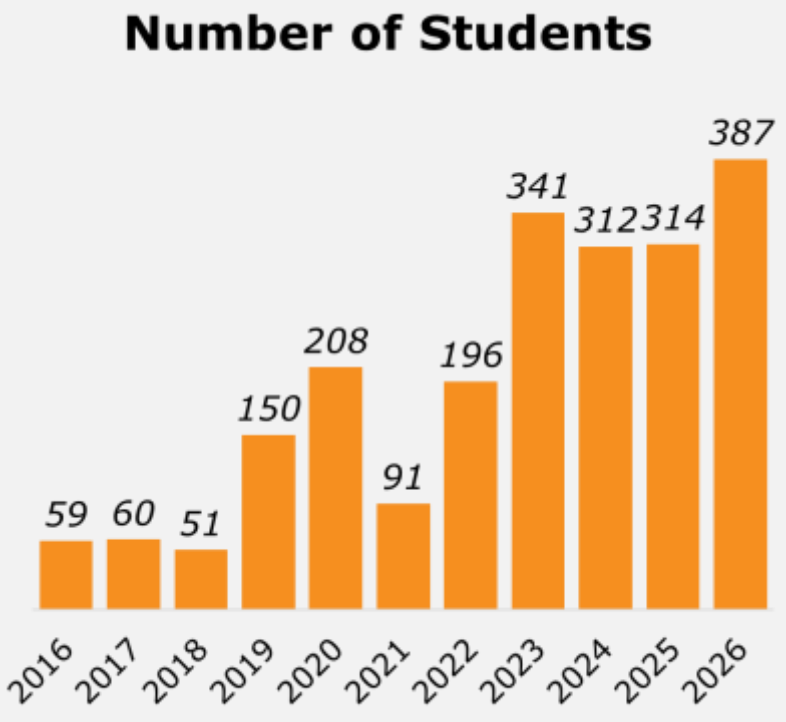
- May 16-19, 2027
- Kansas City – Venue TBD
- Two types of challenges: Wind Challenge and Solar Challenge
- Worlds Competition Elements
  - Wind Turbine Testing
  - Solar Testing
  - Judging Session
  - Instant Challenges
  - Quiz bowl


2027 Kansas KidWind Challenge Events
Colby
(Northwest)
Thu, Feb. 11
Salina
(State)
Sat, Apr. 3
Manhattan
(Northcentral)
Tue, Feb. 16
Kansas City
(Northeast)
Wed, Feb. 24
Dodge City
(Southwest)
Tue, Feb. 9
Hutchinson
(Southcentral)
Thu, Feb. 18
Burlington
(Southeast)
Fri, Feb. 26

KidWind Over the Years







KidWind T-Shirt Design Contest



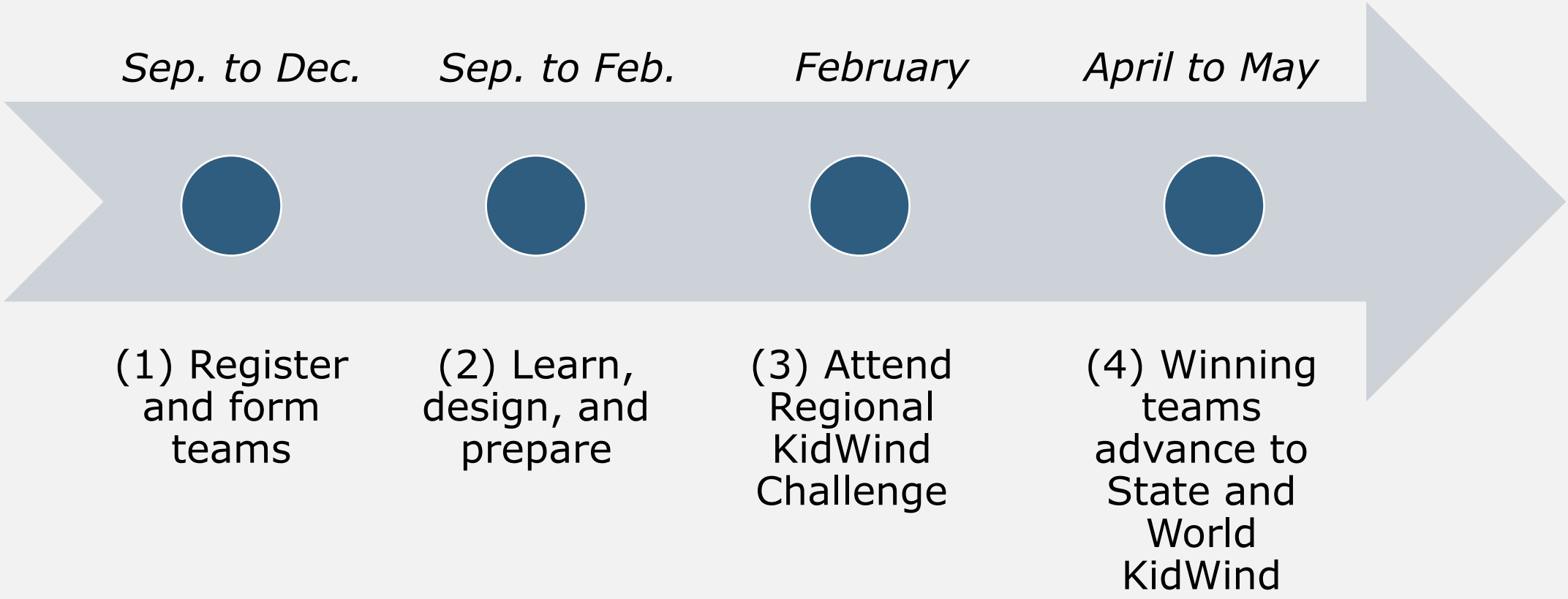
https://kansasenergyprogram.org/2027kidwind-t-shirt

New for 2027!

These changes are highlighted in green in the Rule and Guide Book!

- New AI policy
- No limit on # students per team in Kansas. However, teams advancing to Worlds are limited to five students per team.
- At State, new check-in procedure to ensure correct generator category.
- Lighters, blow torches, or other devices that could create a safety concern are not allowed.

KidWind Challenge Overview



(1) Register and Form Teams

- Students form teams of typically 3-5 students
- Three age divisions:
  - 4^{th}-5^{th}
  - 6^{th}-8^{th}
  - 9^{th}-12^{th}
- Mixed-aged groups will be based on oldest student

(2) Learn, Design, and Prepare

Before attending a Regional Challenge, students will:

1. Learn about energy
2. Design and build a wind turbine that produces electricity using the standard KidWind generator
3. Prepare a presentation

More details about this coming up. Make sure to borrow a wind tunnel if needed!

(3) Attend Regional Challenge

- Students (and coaches) attend one of six regional KidWind Challenges in February
- There are four parts to the Challenge and students must do well at all four to advance:
  - Turbine performance (40 points)
  - Present to judges (40 points)
  - Knowledge quiz (10 points)
  - Instant challenge (10 points)

(4) Winning Teams Advance

- The top two teams in each age division advance to State, which will follow same format as Regionals.
- State will be held in Salina on April 3, 2027 (Sat).
- Teams that win at State will advance to the World KidWind Challenge (May 16-19 in KC area).

How to Register for Regionals *(2-part process)*

- **Initial registration (by December 21 or before full):**
  - Contact info
  - Number of teams and age division (*NO details required*)
  - Which Regional Challenge you want to attend
  - *The third team in each age division is automatically waitlisted (announced 12/16/26)*

- **Follow-up registration (January)**
  - Names of students and teams
  - Dietary restrictions
  - Photo release forms

Basic Rules



- A KidWind wind turbine generator is the only required part. KEP will provide these as needed. Only one generator per turbine allowed at regionals.
- Each team must have its own turbine (including base)
- Each team must have a coach – coaches are responsible for registering team and managing progress
- Visit the Kansas KidWind page for more information. Scroll down to "KidWind Resources" for the rules and logistics.

Basic Rules (continued)

- Turbine must fit in a 48”x48” wind tunnel (allow some room).
- Turbine must be free-standing (has its own tower). KEP will provide weights to help hold turbine in place.
- Power must be generated solely by wind (students cannot “help” get it started by giving it a push with their hand).
- Teams are allowed to use purchased parts (other than pre-made airfoil blades), but judges may award points for creativity and economical use of resources.
- Turbine blades must be made of safe materials (avoid metal, plexiglass, or anything with sharp edges).

Basic Rules (continued)



- When measuring power output from the turbine during the KidWind Challenge, it will be hooked up to a 30-ohm resistor to create a load, so don't forget to test it that way.
- Approximate wind speed in the tunnel is 3.5 meters/second (7.8 mph), so make sure to test your device for high winds.

Limit on Number of Teams

- Regional competitions are limited to ~16-20 teams.
- Waitlisted teams allowed based on date of initial registration.
- You can choose a different regional challenge if one is full *(you will still be limited to three teams per age division)*
- If needed, host an internal competition to select the top teams to bring from your school.

Limit on Number of Teams *(cont)*

- The top two teams in each age division will be invited to attend the State KidWind Challenge
- Top teams at State KidWind Challenge will be invited to attend the Worlds event (in May).
  - *Top two teams in each age division in the KidWind Generator Category*
  - *Top one team in each age division of the Open and Homebuilt Generator Divisions*

What does the day look like?

- Teams arrive between 8am and 9am.
- Teams rotate through the four areas of the competition (a schedule will be provided prior to the event date).
- There will be a presentation by a KidWind Challenge sponsor while scores are tallied (approximately 3pm).
- Winners will be announced at ~3:30pm, so teams can be on the road around 4pm.
- Times will shift based on number of teams.

Staging area



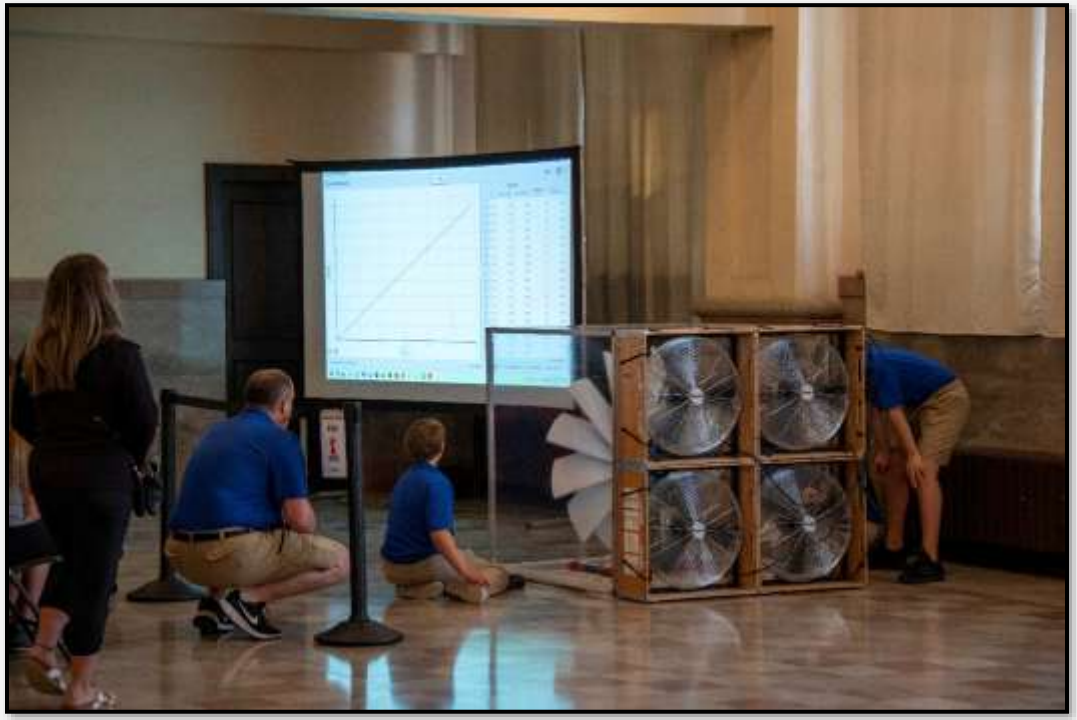


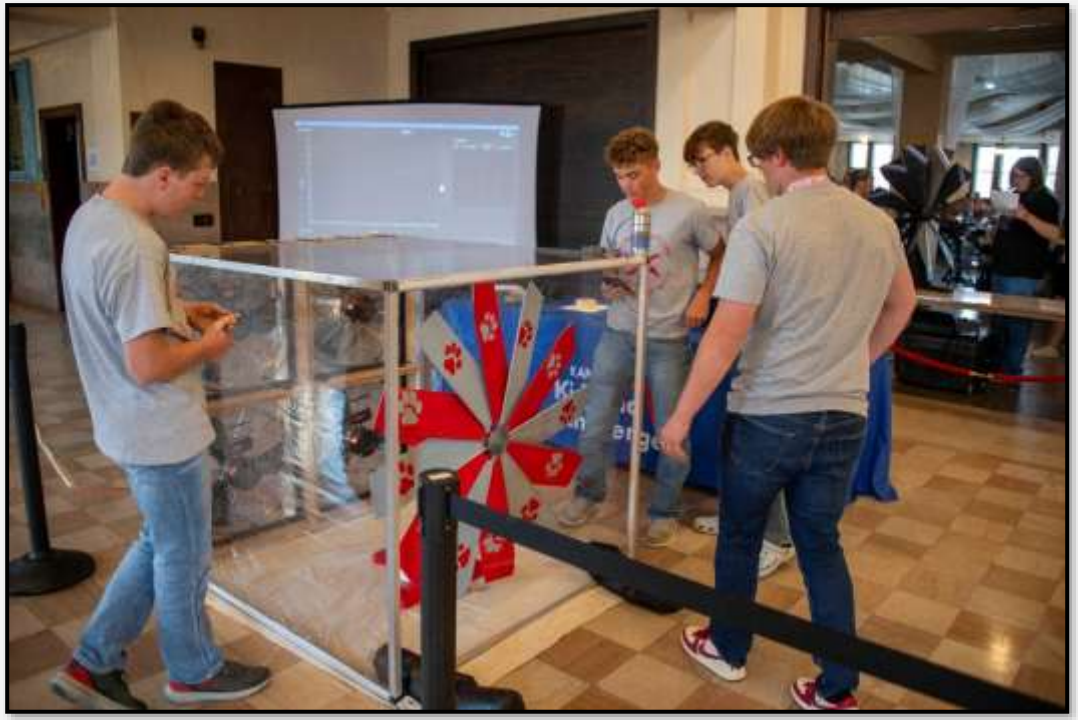
Practice wind tunnel





Performance wind tunnel





Judges Panel





Knowledge Quiz





Instant Challenge





Turbines







Turbines



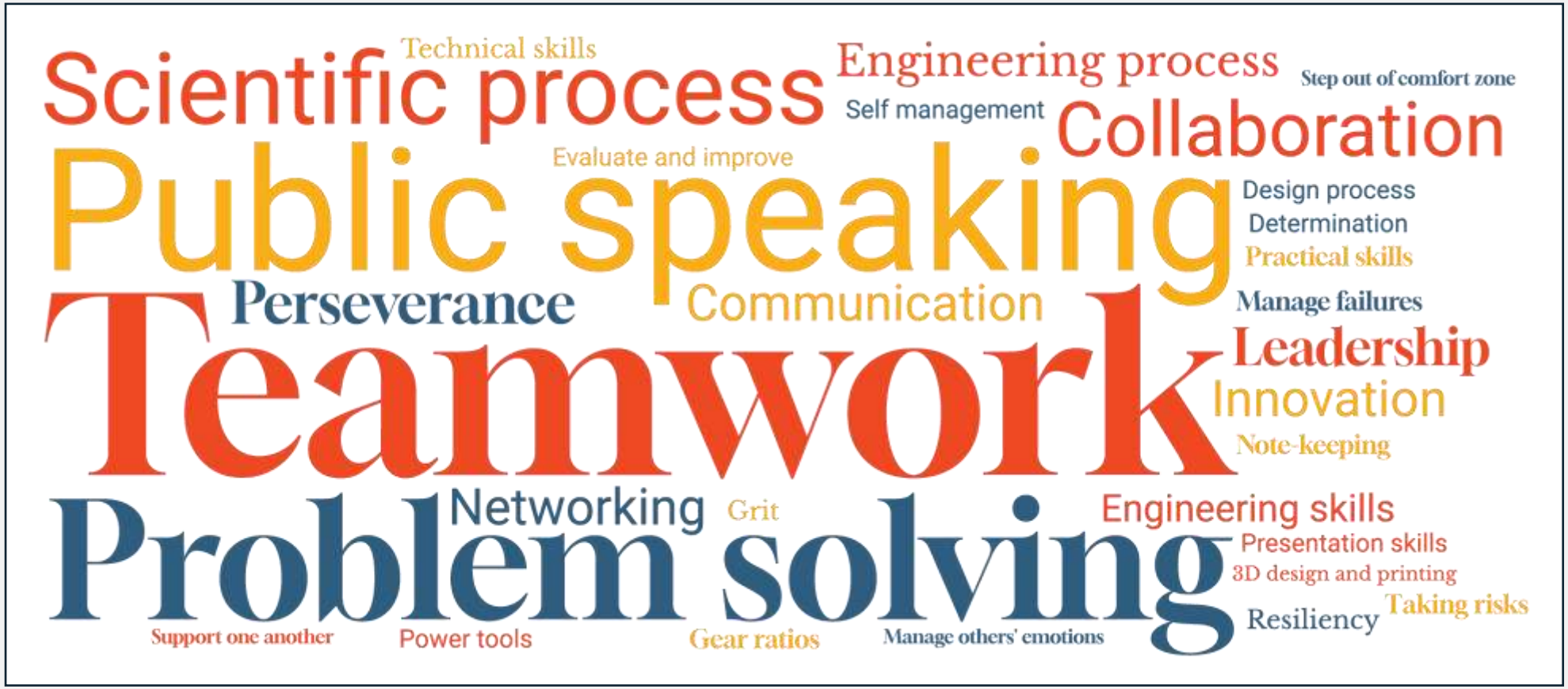




Benefits of KidWind

- NGSS-Aligned Science and Engineering standards
- Career connections
- Project-based
- Compete with peers in a supportive environment
- Students learning and using soft skills
- Support from KEP (events, resources, equipment, reimbursements)

What your students will learn through KidWind



(based on feedback from 2026 KidWind teachers/coaches)

Opportunities Are All Around!

STEM-Focused Classes

Career & Technical Education

Clubs & Competitions

Job Shadowing & Internships

Dual Credit or Technical College Courses



How do teachers incorporate the KidWind Challenge?

- Open to after-school clubs, homeschool groups, etc. (just need a coach)
- Some teachers start after winter break, while others start in the fall and then come back to it in February.
- Teachers can use as a capstone project for students
- Teachers can host an internal competition to decide who will attend a regional Challenge.
- Use the KidWind Study Guide and resources on the KEP website and/or KidWind website.
- Questions? Give us a shout!

Kansas KidWind Challenge Resources

Everything is located on our KidWind Resources webpage:

- 2027 Kansas KidWind Challenge Rule and Guide Book *(overview, eligibility, rules, etc.)*
- Study Guides by age division
- Other activities, curricula, equipment, and resources
- A recording of this webinar
- Scoresheets

Registration

- Register ASAP. We just need your contact information, which Challenge you plan to attend, and how many teams you'll be bringing. We'll get the rest later!
- Choose the regional event or date which makes the most sense for your team(s).
- Registration links and location details can be found at https://kansasenergyprogram.org/educators/kidwind-challenge/upcoming-events

Registration as of 11/13/26

- Southwest Regional (Dodge City) – Feb. 09, 2027 (Tue) **- 7 teams**
- Northwest Regional (Colby) – Feb. 11, 2027 (Tue) **- 2 teams**
- Northcentral Regional (Manhattan) – Feb. 16, 2027 (Tue) **- 13 teams**
- Southcentral Regional (Hutchinson) – Feb 18, 2027 (Thu) **- 16 teams**
- Northeast Regional (Kansas City, KS) – Feb. 24, 2027 (Wed) **- 3 teams**
- Southeast Regional (Burlington) – Feb. 26, 2027 (Fri) **- 11 teams**

Not ready for KidWind?

Our recommendation: Bring a team, even if you don't feel ready!
In 2024, 81% of registered teachers had participated in the past. Many of them will tell you the first year is all about learning!

- Borrow KEP resources and equipment and start with a few lessons/activities
- Host an internal competition at your school
- Attend a regional or state Challenge just to see what it's like. Students are welcome to come and observe. Give us a heads up and we'll try to include them without officially being part of the competition.

Cancellation or Rescheduling

- If at least two schools (with five total teams) aren't registered for a regional Challenge at least two weeks ahead of the event, the Challenge may be cancelled. In this case, a school may choose to switch to a different regional event.
- In the event of possible cancellation due to weather, we will be in close contact with coaches. Our goal will be to cancel the event the evening before the challenge.


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Competition Testing Equipment

- KidWind Wind Tunnel
  - Fans pull air through tunnel instead of pushing air out
- Vernier Go Direct Energy Sensor
  - Measures energy output over time
  - Connects to computers, tablets, and phones using “Graphical Analysis” program



Lending Library

- Wind tunnel loans will be limited starting in January
- KEP is also available for outreach and presentations on energy-related topics
- Equipment Library



2026 Kansas KidWind Challenge Sponsors and Partners



































Contact and keep up with KEP

Subscribe to monthly newsletter for KidWind and energy education updates
(use QR code or kansasenergyprogram.org/signup)

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