



Student Energy Challenge

September 7 – 8, 2017



Teaser – May 15, 2017

Dear Student, Shell Kazakhstan, in partnership with “KAZENERGY” Association, announces the “Student Energy Challenge”

There is a strong possibility that, by the end of the century, the global population could be as high as 10 billion people. That could be an increase of almost 2.5 billion from now. If energy demand is great today, imagine what it will be in the future. This poses a real conundrum. In addition to finding enough energy to meet these growing demands, the need to address stresses on the environment – especially climate change – has never been more critical. The big challenge is how to provide more energy while at the same time significantly reducing carbon dioxide (CO₂) emissions.

The world today is exciting, dynamic and fast-moving. How can the world's energy systems evolve from now, to achieve a better life for all with a healthy planet? Shell believes that only together, innovating with optimism and ingenuity, through collaboration between all players in society, we can make the future today.

This is a global energy challenge and, by participating in the “Student Energy Challenge” you have a chance to be part of the solution!

Aims of the Challenge:

- To contribute to the professional and personal development of students of Kazakhstan;
- To encourage broader understanding and awareness of the importance of energy and its associated challenges;
- To support the application of engineering thinking, creativity and an entrepreneurial mindset to the global energy challenge;
- To support the strengthening of connections, and sharing of experience and knowledge among students;
- To share Shell best practices and technical expertise with Kazakhstan students.

The Challenge of your team is:

To develop a business idea – technology or technology component, product or service – that offers a solution to the Global Energy Challenge in one of the following areas:

1. Monitoring fuel and energy resources;
2. Developing alternative energy from non-traditional sources;
3. Increasing energy efficiency and conservation – in the domestic or commercial usage;
4. More effective use of electric and heat-power engineering;
5. Production of primary energy resources – oil, gas, coal, uranium while producing less CO₂;
6. CO₂ reduction in transportation, power generation, building construction, domestic energy usage or food.

What you need to know to be a part of the Challenge

Key dates for the Challenge:

- May 15th, 2017 – challenge announcement
- May 22nd, 2017 – opening of the registration
- June 5th, 2017 – deadline of the registration
- June 22nd, 2017 – deadline for submission of the video resume of proposal
- July 13th, 2017 – announcement of eight shortlisted teams
- August 17th – deadline for eight shortlisted teams submit final application and proposal
- September 7th and 8th, 2017 – eight shortlisted teams present to panel of judges (7th) and three finalists compete in grand finale during IX KAZENERGY Youth Forum (8th)

Place of the final event:

- EXPO 2017 venue, Astana, Territory of Expo-2017, Conference hall №6
- Be ready to travel to Astana for those days

Prizes:

- 1st place team – 10k EURO + technical/business masterclass, involving relevant global experts (For all the students of the University of the winning team)
- 2nd place team – 5k EURO + half-day online mentoring class (For the participants of the winning team)
- 3rd place team – 3k EURO + two-hour online mentoring class (For the participants of the winning team)
- All other participants – remaining finalists will receive certificates of participation and gifts from Shell. Also the invitation to participate in IX KAZENERGY Youth Forum, in XI KAZENERGY Eurasian Forum and in the "Energy Laboratory" of Shell Pavilion will be provided

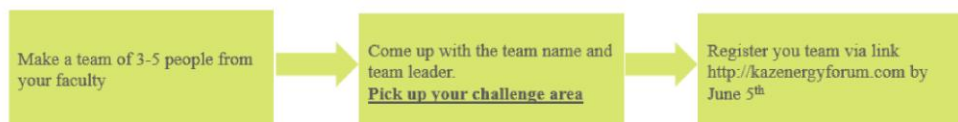
Application process:

- The link to application is www.kazenergyforum.com
- The application end date is June 5th

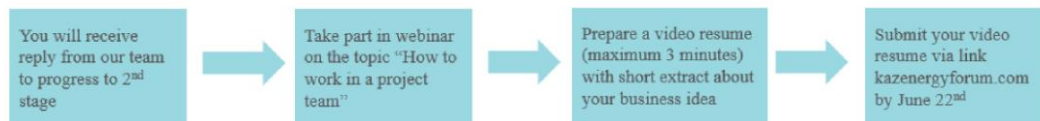
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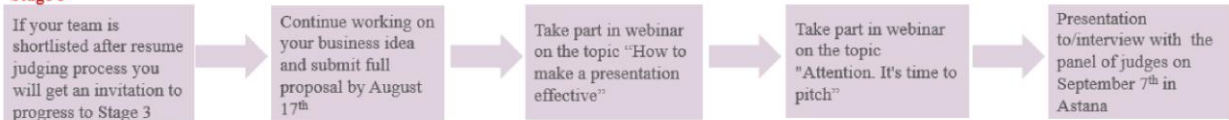
Stage 1



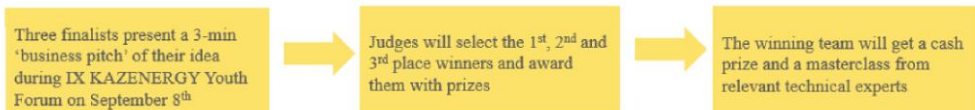
Stage 2



Stage 3



Stage 4



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Judging Criteria

OVERALL CRITERIA

1. Creativity of the idea

Have students demonstrated that there is a need for this technology, product or service? If so, have they been creative in their attempts at resolving an existing problem? Do students introduce ethical business principles in their approach? In which ways is this technology, product or service unique from similar products on the market?

2. Feasibility of the idea, underpinned by sound understanding of energy challenge

Ideas should be creative and unique but they must also be feasible or have potential. Do students detail how they will bring their idea to life? Do they demonstrate informed knowledge of the subject area? Do students adequately use technological/business/financial terms?

3. Novel: How novel or original is the idea?

Your answer should include: What existing idea could you be compared to and why is your idea different? Why is your idea innovative?

4. Value: What benefits (business/social/etc.) would the idea deliver? What is the potential value of this idea?

Consider the wider value, whether it is financial, political, social or technological etc. And don't try to sell this to Shell. This isn't about Shell, this is about the idea.

5. Relevance: How relevant is the idea to the Food/Energy/Water topic?

Many of the ideas touch more than one of the topics, so please consider this in your answer. The greater the relevance, the greater the impact.

ADDITIONAL CRITERIA

1. Overall quality of the pitch (for Stages 3 & 4)

What was the quality of the presentation like? Did the presentation follow a logical structure? Were students' voices, body language and eye contact good? Did students exhibit confidence and clarity? Students may use notes but should not read from them.

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GOOD LUCK!

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