

REGULATION

on the International student competition of innovative multy-storey greenhouse design projects

(Urban Greenhouse Challenge: Reforest)

1. General

- 1.1. This Regulation establishes the terms and procedure on conducting the International Competition among student projects for innovative multi-storey greenhouse complexes in urban environment **Urban Greenhouse Challenge: Reforest** (hereinafter the Competition).
- 1.2. Russian and international institutions or companies can act as partners in the Competition.
- 1.3. The Competition is held on a specially developed Internet platform reforest.tpu.ru (hereinafter the Competition platform).
- 1.4. The official language of the Competition is English.
- 1.5. Participation in the Competition is fee-free.

2. Goals and Objectives

- 2.1. The Competition goal is to identify some innovative and technologically prospective projects able to solve the challenge oriented to accelerated forest recovery after fires and felling.
- 2.2. The Competition objectives are to:
 - identify talented students through solving a practical and relevant research problem.
 - expand students' knowledge in various scientific and technical subject areas related to the Competition project;
 - enhance creativity, research interests, critical thinking and entrepreneurial skills among students:
 - establish academic contacts between partner universities;
 - attract the attention of Russian and international companies and institutions, as well as of a public eye to reforestation issue.
 - develop some innovative projects with the prospect to be implemented in a real sector of economy;

3. Participants

- 3.1. As the Competition is international, the participation is open and welcoming to all students from any country of the world.
- 3.2. Teams from 3 to 10 people are allowed to participate in the Competition.

- 3.3. Participants of the Competition can be undergraduate, graduate and postgraduate students of any field of study. New graduates (graduated from university no earlier than July 2019) can be the members of a team, but must not be more than 20% of all team's members.
- 3.4. If a participant is under 18, then one of his/her parents or guardians give a consent to his/her participation.
- 3.5. At least one team member must speak English at the level not lower than B2 (upper-intermediate).
- 3.6. There can be no more than two teams from the same university among the finalists. A team belongs to a university, if at least 60% of its members are students or recent graduates of this university. Other teams are considered to be mixed.
- 3.7. Ineligibility to the requirements is the ground for an individual participant/entire team to be disqualified.

4. Organizers

- 4.1. The organizer of the Competition is National Research Tomsk Polytechnic University (TPU).
- 4.2. The Competition has the Organizing Committee, the functions of which include:
 - determination and approval of the topic, content, stages and procedures of the Competition;
 - promotion of the Competition through various information channels;
 - attracting representatives of Russian and international universities, funds, scientific organizations, companies to participate in the Competition;
 - inviting the jury to evaluate the projects presented at the Competition.
- 4.3. The Competition Committee is under responsibility of the Organizing Committee and includes TPU representatives, partners, experts, lecturers and leading specialists in the project areas, both Russian and international.
- 4.4. The Competition Committee consists of at least three experts in the subject areas relevant to the Competition topic.
- 4.5. The Competition Committee conducts an objective review of all applied projects to select the teams, which will participate in the next round, and determine the winners with providing the analysis of their projects' strengths and weaknesses.

5. Procedure for participation in the Competition

- 5.1. To participate in the Competition, each team member registers on the Competition platform until February 28, 2020. The registration requires an email address, which will need to be verified.
- 5.2. All materials are provided in English. An unlimited number of projects can be submitted by one team.
- 5.3. The Competition platform allows some individual participants to find a team for themselves.
- 5.4. More detailed instructions on how to register in the Competition on the platform are given in "How to apply".

6. Prizes

6.1. The Competition prize fund is \$ 10,000. Projects that take first, second and third places receive respectively 4000, 2000 and 1000 \$.

- 6.2. Teams that offer the best solution for one or more cases will receive \$ 300 each.
- 6.3. The number of winning teams and the amount of remuneration may be adjusted depending on the number of participants in the Competition.
- 6.4. The Competition partners can award some special prizes to other projects that have not been selected by the jury as winners.
- 6.5. In addition, the teams that did not become the winners of the Competition, but proposed interesting projects, may be offered the help of the organizers and partners of the Competition in project's ideas promotion and implementation.
- 6.6. All participants of the Competition receive diplomas of participation.

7. Stages and terms of the Competition

- 7.1. The competition is held from 12/10/2020 to 30/06/2021.
- 7.2. The timeline of the Competition:

October, 2020	Competition Announcement	
November, 2020 - February, 2021	Teams registration	
December, 2020 - February, 2021	Teamwork, online lectures, seminars, master classes	
March, 2021	Online selection, finalists selection	
March-May, 2021	Work with finalists' projects	
June, 2021	Final stage and winners awarding	

8. Project Evaluation Procedure

- 8.1. A specially developed rating scale is used to select the best projects. Projects' presentations are evaluated and contributed to the overall score.
- 8.2. Projects are evaluated in three stages:
 - Preliminary evaluation compliance with the formal requirements of the Competition. All team members are registered; team members meet the requirements for participants; the application is filled with the information needed; all materials are provided. Based on the evaluation results, all teams that meet the requirements of the Competition are allowed to participate in the next round.
 - The first preliminary round. Remotely the teams must submit: the design-project of the city farm (any visualization method 3D model, graphics, etc.) and the solutions of the Cases (Case study) offered at the first round. The results are presented in an electronic format as presentation materials (PowerPoint, Google Slides, Prezy, etc.) and do not imply a face-to-face presentation. A video presentation or a video questionnaire of a team is not obligatory, but if they are provided, it gives to a team some additional points.
 - According to the results of the first round, no more than 10 teams with the highest score will advance to the Finale.
 - The Finale. In person / in absentia (depending on the epidemiological situation) teams must submit: a well-developed design-project of the city farm (any way of visualization 3D model, graphics, etc.) and solutions to the Cases offered at the final round. The results are presented in an electronic format as presentation materials (PowerPoint, Google Slides, Prezy, etc.) and do not imply a face-to-face presentation.

8.3. Evaluation Criteria:

Evaluation of presentation material and Case study solution	Points
Topic relevance (justification)	0-5
Unique information and statistics on a project topic	0-7
Analysis of analogs / traditional solutions	0-7
Analysis and comparison of possible technical solutions	0-7
Variety of approaches to a complex design and its construction	0-7
Design documentation	0-10
Project progress and its description	0-5
Final project version and its description	0-10
Project aesthetic evaluation	0-10
Project economic and environmental evaluation	0-10
Project originality;	0-10
Video presentation or video questionnaire	0-5
Case study (solution description)	0-40
Evaluation of presentation materials and their face-to-face prese	ntation in June
Clarity in material presentation	0-15
Depth of knowledge and erudition	0-15
Quality of multimedia and presentation	0-15
Questions and answers	0-15

8.4. There are no appeals on the results of the Competition.

9. Special Terms

- 9.1. The copyright for the materials developed by the participants belongs to the authors of these materials.
- 9.2. The organizers of the Competition may, if necessary, use the Competition projects, in part or in full, in mass media, as well as in other publications with the reference to an author.
- 9.3. The organizers of the Competition follow confidentiality in terms of personal data of all the participants.
- 9.4. The materials provided must not violate the rights of third parties.
- 9.5. The processing of personal data in the Competition is carried out in accordance with the requirements of the Federal Law dated on July 27, 2006 No. 152-FL (as amended on April 24, 2020) "On Personal Data".
- 9.6. The organizers are entitled to amend the Regulations with subsequent mandatory publication on the Competition platform.

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