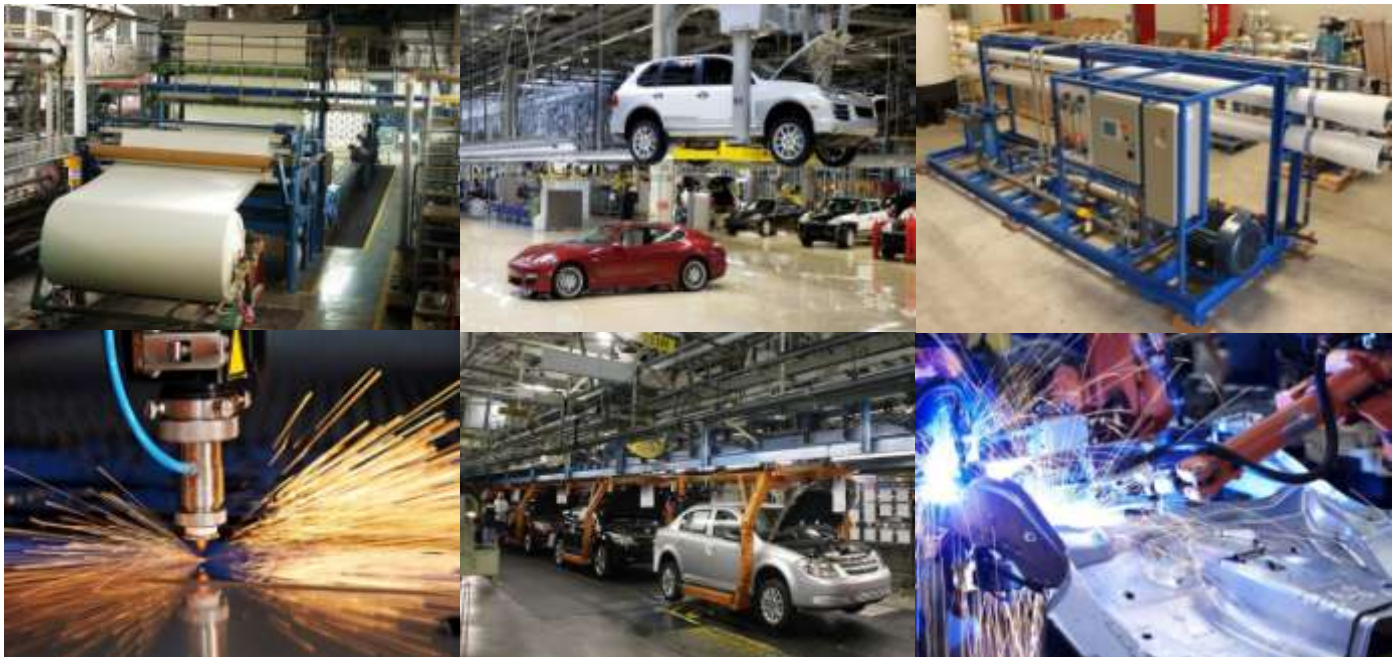




Indus Motor Company (IMC) Manufacturing Innovation Prize



National Innovation Grand Challenge (NIGC)

Rules and Regulations

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Contest Registration Page: <http://www.pif.org.pk/NIGC-2013>

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Indus Motor Company (IMC) Manufacturing Innovation Prize



1) Purpose

The Indus Motor Company (IMC) – Manufacturing Innovation Prize is an Open Innovation Challenge seeking to transform the manufacturing including, but not limited to, the automotive landscape of Pakistan. It will do so by inspiring individuals and teams – of students, professionals, entrepreneurs, vendors, and ordinary citizen innovators – to use the power of innovation and creativity to enhance the competitiveness of manufacturing industry in Pakistan.

The IMC Manufacturing Innovation Prize is part of Pakistan Innovation Foundation’s National Innovation Grand Challenge (NIGC) – a year-long Open Innovation Contest to tap into and build upon the creativity and genius of Pakistani people to help solve the country’s development problems and competitiveness challenges.

Pakistan Innovation Foundation is a private-sector-driven non-profit entity created to promote innovation within the private sector and the broader society in Pakistan. PIF’s Ideas Contest 2013 is a collaborative brainstorming exercise to help find ‘out-of-the-box’ solutions for Pakistan’s Development Problems and Competitiveness Challenges.



2) The IMC – Manufacturing Innovation Challenge

The National Innovation Grand Challenge is modelled after the X-Prizes and the Grand Challenges in Global Health in that it specifies a specific problem with a clearly quantifiable and defensible end-goal and seeks out individuals and teams to compete to solve the problem and win a prize.

This not only encourages competition and collaboration but also ‘out-of-the-box’ thinking to solve long-standing problems that seemingly appear to be intractable. ‘Out-of-the-box’ thinking encourages and enables one to work around the limitations or constraints that may have hampered the solution of a problem in the past.

The Indus Motor Company Manufacturing Innovation Prizes seeks to address manufacturing challenges that meet specific criteria within one of the following two areas:

- **Challenge A: To develop a replicable, scalable, and commercialisable product or process innovation that:**
 - (a) enhances productivity of manufacturing process by at least 33% OR
 - (b) reduces energy intensity of manufacturing process by at least 33% OR
 - (c) reduces industrial waste from manufacturing process by at least 33%

This could be achieved through (a) process innovation or development of a specialised tool or technique, (b) changing the energy mix, process innovation, co-generation or smart integrated use of energy within the manufacturing process, and (c) process innovation, development of a creative and inexpensive waste treatment process, or finding an alternative use of industrial waste within or outside manufacturing.



- **Challenge B: To develop an innovative product, service, or tool that complements or enhances the utility of a manufactured product** (e.g. low cost robotic arm, environmental conditioning system, automatic tyre changer, anti-dent paint, or cold start) that has a compelling market potential and cost-performance profile for rapid commercialisation in Pakistan

While the above targets (33%) are meant to be achieved by all contestants to become eligible to win a prize, in reality this is only meant to be a floor and not the ceiling for the prizes. It is our hope, and expectations, that individuals and teams shall exceed the 33% target and winners may achieve efficiencies and improvements of 50% or more. Though what is an appropriate may sometimes vary depending upon particular applications (e.g. small improvement in large processes may deliver substantial benefits). This, we believe, shall introduce a dynamic and competitive feel to the overall exercise and inspire and energise people to push the envelope of what's possible thus creating significant impact.

The Indus Motor Company – Manufacturing Innovation Prize and The National Innovation Grand Challenge seek to inspire people to go beyond the 'problems mindset' into the 'solutions mindset' and feel empowered to create low-cost local solutions to industry's problems to enhance the competitiveness of Pakistan's manufacturing sector. In short, we're looking for everything from small and practical creative ideas that can begin to take small steps towards the solution of a big problem and big inspirational ones that can change the industrial landscape of the country.

3) Who is Eligible to Compete?

The Competition is OPEN TO ALL PAKISTANIS irrespective of age, gender, education, or employment-status.

In short anyone, anywhere, who thinks he (or she) has an idea that can effectively address the challenge areas specified above is eligible to register a team and compete to win. Without excluding other possibilities, the contest may be of immediate interest to three types of participant audiences:



- **Contestants from amongst the Members of the Automotive Vendor and OEM Industry** including, but not limited to, the vendor and supplier network of IMC who may have an immediate interest and hands-on experience of working on manufacturing and industrial problems of productivity, energy-use, and waste that are of most interest to the Prize Sponsor – The Indus Motor Company (IMC)
- **Contestants from amongst the broader Industrial and Engineering Companies** including vendors, engineering groups, technicians, and informal innovators, etc. who may have ideas, relevant hands-on experience, and experimental opportunities to address problems of productivity, energy use, and waste in the manufacturing sector
- **Contestants from academia and higher education institutions and colleges including faculty and students** (particularly those engaged in final year projects – FYPs) within relevant disciplines who may work alone in a laboratory environment or partner with an industry player to address problems of productivity, energy use, and waste in industry

However, there are certain regulations affecting team formation and team sizes. Teams may be formed in one of the following ways:

- **ELIGIBLE FOR OPEN INNOVATION PRIZE ONLY (Subject to conditions)**
 - Corporate Team (up to 3 members)
 - University-Industry Team (up to 3 members)
 - Professionals and Entrepreneurs' Team (up to 3 Members)
 - Citizen Innovators' Team (up to 3 Members)

- **ELIGIBLE FOR STUDENT PRIZE AND OPEN INNOVATION PRIZE (Subject to conditions)**

- Student Team – 4 Bachelors Students + 1 Faculty Member
- Student Team – 2 Masters Students + 1 Faculty Member
- Student Team – 1 PhD Student + 1 Faculty Member

4) The Competition

The NIGC is not a regular ideas or a business plan competition. The contestants and winners of NIGC shall not only identify and work towards designing a solution that could potentially make a huge impact on a development problem or competitiveness challenge, they will actually progress through successive elimination rounds to create a working prototype and carry out a first proof of principle through in-situ demonstration of the proposed solution.



The NIGC is a year-long multi-stage contest that kicks off in September 2013 and runs until August 2014. There are four stages of the competition with individual contestants and teams successively passing through the stages of design, development, and demonstration to bring their ideas to life. The process shall culminate in a National Conference, Innovation Showcase, and Awards Gala in August 2014.

The timelines and various stages and milestones are described below:

- **Registration Phase: November 2013 – January 2014**
 - November 5, 2013 – Launch of the National Innovation Grand Challenge
– Registration Opens for NIGC
 - November – January 2014 – Universities and Corporate Roadshows + Idea Labs
- **Design Phase: November 2013 – January 2014**
 - January 31, 2013 – Deadline for Submission for Designs
 - February 10-14 2014 – Design Contests in KHI, LHE, ISB (Judging + Innovation Labs)
– Notification of Quarter Finalists
- **Prototyping Phase: January – March 2014**
 - March 31, 2014 – Deadline for Submission of Prototyping Reports
 - April 2014 – Prototyping Contests in KHI, LHE, ISB (Judging + Scale Labs)
– Notification of Semi-Finalists
- **Demonstration Phase: May – July 2014**
 - July 2014 – Submission of Demo Reports and Onsite Validation of Innovations
 - July 31, 2014 – Notification of Finalists of NIGC
- **Grand Finale: August 2014**
 - August 15, 2014 – National Conference, Innovation Showcase and Awards Gala
– Notification of Winners and Runners Up of NIGC

The National Innovation Grand Challenge is a first-of-its-kind national ideas-to-reality contest with year-round activities that will engage Pakistan’s leading Universities, Corporate entities, and non-profit organisations in sponsoring, judging, and mentoring activities.

5) Prizes and Benefits

While the specified targets are a necessary condition for winning the Open Innovation and Dedicated Student Prizes, they are not sufficient. The Prizes shall be won based on the concept of ‘value created’ whether in the form of monetary value of enhancement in productivity of the

“Creativity is its own reward ... [it] is a source of happiness – even if that sounds idealistic non-sense, it’s still true.”

- Max Mackeown, *In The Truth About Innovation*

manufacturing process, value of energy potential energy saved, or economic opportunity cost of waste recycled or disposed through innovative means. The judges shall validate the proposed idea in action and will certify the value created as a result. The judges' decision shall be final.

The prizes and benefits include:

Prize Category	Prize Purse	Qualification Criteria
Grand Prize	TBD	TBD
<p>Open Innovation Prize</p> <p><i>The Open Innovation Prize is the highest prize within a single category of the National Innovation Grand Challenge</i></p>	<p>PKR 1,000,000</p> <p><i>(PKR 1 Million)</i></p>	<p>The Open Innovation Prize can be won by a Corporate / Professional / University-Industry Team that:</p> <ul style="list-style-type: none"> - Creates the highest value of all teams, AND - Beats the target specified in Challenge Categories a), b) or c), AND - Beats the closest Student Team by a margin of at least 25% <p>Open Innovation Prize can be won by Student Team that:</p> <ul style="list-style-type: none"> - Beats the target specified in Challenge categories a), b), and c) AND - Achieves performance target that is short of no more than 25% of the closest Corporate / Professional / University-Industry Team
<p>Dedicated Student Prize</p> <p><i>The Dedicated Student Prize can only be won by a Student Team competing within a single category of the National Innovation Grand Challenge</i></p>	<p>PKR 500,000</p> <p><i>(PKR 0.5 million)</i></p>	<p>The Dedicated Student Prize can be won by a Student Team that:</p> <ul style="list-style-type: none"> - Creates the highest value of any student team in the relevant competition, AND - Beats the target specified in Challenge Categories a), b) or c), AND - Achieves a performance target that is short of more than 25% of the closest Corporate / Professional / University – Industry Team
<p>Miscellaneous Prizes and Recognitions</p> <ul style="list-style-type: none"> - Best University - Best Company - Best Women Team Prize - Best Underdeveloped Area - Best Faculty Prize - Best Mentor Prize - Best Company Prize - Best Media Coverage 	<p>Cash and Kind</p> <p><i>(Different Denominations)</i></p>	<p>Different rules apply. Judges' decision shall be final.</p>
<p>Certificates of Participation and Certificates of Accomplishments</p>	N.A.	<p>Certificates of Accomplishment shall be given to each Team Member of all Finalist Teams</p> <p>Certificates of Participation shall be given to each Team Member of all Semi-Finalists Teams</p>
<p>Training, Mentoring, and Guidance</p>	N.A.	<p>Three (3) FREE Training Workshops for Finalists, Two (2) for Semi-Finalists, and One (1) for Quarter Finalists.</p>

When a Student Team wins the 'Open Innovation' Prize, the Dedicated Student Prize shall be won by the Student Team standing second in the contest provided it has also beaten the target performance specified in Challenge categories a), b), or c) failing which the Student Prize remains unclaimed for that specific year.

NIGC Contestants shall also receive lots of mentoring and training on how to refine their ideas, implement these innovations, and scale the innovations to create an impact forward from some of the leading innovators and entrepreneurs in Pakistan.

In addition to the prizes and mentoring, PIF, in collaboration with the Prize Sponsors and partners, shall organise several regional and national events with wide publicity and style and the Winners of the NIGC shall receive spotlight and acclamation from far and wide. This will bring national spotlight and the attention of potential investors and partners to take some of the innovative ideas forward to fruition and scale.

6) Additional Rules of the Competition

- 1) The Contestants must register their ideas and teams by filling out a form at: (<http://www.pif.org.pk/NIGC-2013>) and submit any associated files such as figures, graphics, or diagrams relating to their innovative idea. Only ideas submitted through this form shall be deemed to have registered for the competition.
- 2) PIF and its partners may also hold a series of events – Roadshows at Universities and Corporate Entities – as well as Ideas Labs across the country to facilitate the ideation process that may encourage individuals and teams to register for the competition and help refine the ideas to make them 'eligible' for NIGC.
- 3) PIF reserves the right to exclude a submission at this stage by declaring it ineligible based on lack of information, incomplete information, faulty or defective information, information not subscribing to competition rules or categories, or non-viability of an idea.
- 4) Once an innovative idea has been declared 'eligible' to compete in the NIGC, the contestants may initiate the detailed design process. PIF shall specify the specific requirements at various stages of the competition and the appropriate mode of communication with the team to submit further refinements of the idea during various competition stages.
- 5) At each stage, the contestants are required to think carefully about their ideas and provide as much detail as necessary and possible to enable a jury to evaluate the ideas on the requirements of that particular phase. The decision of how much is revealed to convince the jury of the viability of an idea rests with Contestants.
- 6) The participants may register at any time during the Registration Phase (September 15 to December 15, 2013). However, registering sooner shall allow them more time to do the detailed design and hence better chances of making it through to next stages of the competition. However, contestant may submit one entry only and individuals may not be on more than one team.
- 7) By submitting an entry, the Contestants give PIF (or the sponsor) the right to disclose informed specified for public consumption in a manner it deems appropriate to promote NIGC or its impact. However, any supporting documents or diagrams submitted with the entry or material deemed confidential shall not be divulged to the public without prior permission of the Contestants.
- 8) By submitting an entry, the contestants certify that the work being submitted is original and their own and absolve PIF or its partners of any claims - legal or moral - of intellectual property infringement or theft of any kind. 'Non-original' ideas must have an innovative and original angle to application in Pakistan. This shall be evaluated by the judges.
- 9) PIF reserves the rights to exclude any entry from the competition without having to disclose a reason for it. PIF also reserves the right to modify certain rules of the competition to allow for a fairer and more productive competition without jeopardising the intent of the overall contest.
- 10) The training and mentoring provided to the Contestants is free of cost. However, PIF is not responsible for travel or boarding expenses for the participants. Contestants are responsible for making their own travel arrangements to the city (ISB, LHE, or KHI) nearest to their place of residence.