Company Application

Introduction

The Artemis Project Top 50 application is designed to simulate the initial examination of a technology company from the perspective of either an early-stage investor or a potential partner. In a brief format, the application brings together the most important information on a company and its primary flagship product. The application information provides the judges with a basic understanding of the value of the product's technological innovation as well as a company's potential to build significant revenue and profitability. The survey evaluates companies and their flagship products from three perspectives:

- Technology: Both intellectual property and know-how
- Application: Product design for efficient and reliable performance in the field
- **Business Opportunity:** Potential for wide-scale application of this product in the market with a robust business behind it.

In order to rank the most promising approaches to different water resource challenges, the questionnaire requires that a company choose a single category that best defines its flagship product's role in water management.

Many of the most important water management products bring several innovations together. The questionnaire provides each company that applies with an option to choose a secondary as well as a primary category. A separate question asks the company to identify the market that this product is addressing first.

We also want to hear about as many of the metrics that the company can offer to demonstrate the sustainability of its product, from an economic, social and environmental perspective. Both utility and business customers are seeking out new ways of measuring the values of new approaches to water management.

Note: The Artemis Project and the judging team for the Top 50 Company Competition will base its opinion on the material rendered in the company application. We assume that the companies have submitted this information in good faith and that the information is accurate.

In evaluating companies, we take an optimistic perspective regarding the capabilities of the product, the efficiency of its development and the skills of the team.

Applicants are invited to supplement this application with additional material. Keep in mind that judges will only refer to this supplemental material at their own discretion.

Details on the competition, eligibility and its schedule are available on the Top 50 webpage.

2012 Top 50 Competition **Company Information** *Company Name: *Chief Executive Officer: *Primary Contact Person: ***Work Phone: *Email Address:** Address 1: Address 2: City: **State/Province: Postal Code: Country:**

Technology--Product Solution

| recimologyProduct Solution |
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| *Please describe this technology and how it works: What solution does your product provide? How does it address an unmet need for your customers? Describe the basic mechanics of how the product introduces a disruptive innovation in water management. (Please limit to 400 words.) |
| *Quantify Benefits: How do you measure your product's benefits in terms of reduced costs and increased profitability for the user? What is its value proposition? Please |
| focus on the most important pieces of quantitative data that you have on your |
| product's performance or expected performance. (Please limit to 400 words.) |
| |
| ★IP and Know-How: Describe your IP, generally. What is your company's plan for |
| protecting the intellectual property and know-how around your product and the |
| |
| innovation that it provides? Please list any relevant patents or other formal |
| mechanisms for protecting your innovation. How much of that plan have you |
| implemented to date? (Please limit to 400 words.) |
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| Арр | dication focus | | | | | |
|-----|--|--|--|--|--|--|
| | m the categories below, choose ONLY one or two target areas in which your product supports water nagement. | | | | | |
| Арј | Application Focus: Asset Management and Water Delivery Networks | | | | | |
| | Pipe inspection/leakage detection | | | | | |
| | Pipe rehabilitation/repair | | | | | |
| | Network monitoring and control | | | | | |
| | Energy recovery from networks | | | | | |
| | Network management/optimization | | | | | |
| | Other network technologies | | | | | |
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| Apı | olication Focus: Industrial Water Processes | | | | | |
| | Cooling & boiler water treatment | | | | | |
| | Ultrapure water | | | | | |
| | Closed-loop systems | | | | | |
| | Anaerobic treatment technologies | | | | | |
| | MBR technologies | | | | | |
| | lon exchange technologies | | | | | |
| | Zero Liquid Discharge systems | | | | | |
| | Other industrial water processes | | | | | |
| | | | | | | |
| Арј | olication Focus: Drinking Water Treatment | | | | | |
| | Advanced contaminant removal | | | | | |
| | Desalination | | | | | |
| | Unconventional water sources | | | | | |
| | Developing countries solution | | | | | |
| | Other drinking water technologies | | | | | |
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2012 Top 50 Competition **Application Focus: Municipal Waste Water Treatment** Advanced primary treatment processes Advanced secondary biological treatment processes Energy efficiency technology Advanced contaminant removal Decentralized re-use technologies Disinfection technologies Solutions for developing countries Other waste water treatment processes **Application Focus: Sludge Management** Sludge pre-treatment Sludge de-watering/drying Sludge to energy processes: incineration, gassification, pyrolysis/HTC, supercritical oxidation, anaerobic digestion, advanced nutrient removal technologies, sludge to farmland processes Other sludge management (please specify) **Application Focus: Irrigation Technology** Recovering valuable biproducts, such as phosphorus, lithium, metal plating, etc. Energy recovery, waste heat recovery Waste to energy Other irrigation technologies (please specify)

Market Focus

On which market segment is the company focusing the application of your flagship product? From this listing, choose

| only one "primary" and "secondar blank next to that segment. | y" segment f | rom the entir | e list that ap | pears below | . Please | type the word | d in the |
|---|---------------|---------------|----------------|-------------|----------|---------------|-------------|
| For example, you might type "prin | nary" next to | 'Chemical & | refining' and | "secondary | next to | 'Waste water | treatment.' |
| Market Segment | | | | | | | |
| Industrial | | | | | | | |
| Heavy Industry | | | | | | | |
| Oil & Gas | | | | | | | |
| Chemical & Refining | | | | | | | |
| Power Generation | | | | | | | |
| Food & Beverage | | | | | | | |
| Pulp & Paper | | | | | | | |
| Mining & Metals | | | | | | | |
| Light Discrete Industrial | | | | | | | |
| High-tech (e.g., pharma, semi-conductor, wafers) | | | | | | | |
| Manufacturing (e.g., auto, white goods, equipment) | | | | | | | |
| Other | | | | | | | |
| Additional Focuses | | | | | | | |
| Agriculture | | | | | | | |
| Outdoor on-site water management | | | | | | | |
| Institutional (e.g., universities and hospitals, real estate managers, retail operations, accommodations, etc.) | | | | | | | |
| Ballast water | | | | | | | |

| Muni | cipal | | |
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| rinking) | g water treatment | | |
| Vaste w | vater treatment: Primary | | |
| | vater treatment: Secondary cal, membrane) | | |
| | vater treatment: Tertiary | | |
| Other | r (25 word limit): | | |
| Othici | r (20 Word mint): | | |
| *11n | oon which geograph | ical market will vo | u he focusi |
| | Vestern Europe | icai market wiii yo | u De locusi |
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Status of Product Development

| C Lab/bench scale proof of concept C Pilot scale Full-scale operation Full-scale operation Full-scale operation for more than a year C Regulatory approval (permit to apply and sell in large-scale markets) Validated studies by regulated bodies sufficient for government or utility rebates Please specify the approvals, verification and validation that your product has received. Please specify the organizations that have conducted the validation. *What industry needs or "pain-points" does your product meet? How completely does it meet them? | • | What is the current status of your product introduction? (select one): |
|---|---|--|
| Pilot scale Full-scale operation Full-scale operation for more than a year Regulatory approval (permit to apply and sell in large-scale markets) Validated studies by regulated bodies sufficient for government or utility rebates Please specify the approvals, verification and validation that your product has received. Please specify the organizations that have conducted the validation. *What industry needs or "pain-points" does your product meet? How completely | 0 | No current bench scale or lab testing |
| Full-scale operation Full-scale operation for more than a year Regulatory approval (permit to apply and sell in large-scale markets) Validated studies by regulated bodies sufficient for government or utility rebates Please specify the approvals, verification and validation that your product has received. Please specify the organizations that have conducted the validation. *What industry needs or "pain-points" does your product meet? How completely | 0 | Lab/bench scale proof of concept |
| Full-scale operation for more than a year Regulatory approval (permit to apply and sell in large-scale markets) Validated studies by regulated bodies sufficient for government or utility rebates Please specify the approvals, verification and validation that your product has received. Please specify the organizations that have conducted the validation. *What industry needs or "pain-points" does your product meet? How completely | 0 | Pilot scale |
| Regulatory approval (permit to apply and sell in large-scale markets) Validated studies by regulated bodies sufficient for government or utility rebates Please specify the approvals, verification and validation that your product has received. Please specify the organizations that have conducted the validation. *What industry needs or "pain-points" does your product meet? How completely | 0 | Full-scale operation |
| Validated studies by regulated bodies sufficient for government or utility rebates Please specify the approvals, verification and validation that your product has received. Please specify the organizations that have conducted the validation. *What industry needs or "pain-points" does your product meet? How completely | 0 | Full-scale operation for more than a year |
| Please specify the approvals, verification and validation that your product has received. Please specify the organizations that have conducted the validation. *What industry needs or "pain-points" does your product meet? How completely | 0 | Regulatory approval (permit to apply and sell in large-scale markets) |
| *What industry needs or "pain-points" does your product meet? How completely | 0 | Validated studies by regulated bodies sufficient for government or utility rebates |
| *What industry needs or "pain-points" does your product meet? How completely | | |
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| | | es it meet them? |

| 2012 Top 50 Competition |
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| * Goals for initial validation: What are the key measurements that you will need to convince early customers to pilot and adopt? |
| What is your schedule for validating your technology solution? What is your time frame for initial pilot, operational pilot, and validation by third-party? |
| |
| * Costs: What is your (estimated) cost per gallon/liter processed vs. existing treatment and emerging technologies (or projected cost per gallon)? |
| What are its installation costs for design, building work and materials, commissioning, training? |
| What are its operating inputs (i.e., energy, consumables, operators, etc)? |
| What are your product's life-cycle costs? Please estimate cost of materials, life-time of operation and disposal. How reliable is it expected to be and what routine maintenance needs will it have? |
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| 2012 Top 50 Competition | |
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| *Regulation and Compliance | |
| What economic, compliance or environmental valimplementing your product? What kinds of regulathere any safety issues? | |
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| 2012 Top 50 Competition |
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| Business Viability |
| * Cost to Profitability |
| What are/will be the costs (US\$) of gaining regulatory approval for your first major markets? What have been or will be the costs for bringing the product to wide-scale |
| market penetration and the company to profitability? (300 word limit) |
| |
| * Potential Market Size |
| What is the potential market size for your specific application, given the current size and expected growth of that specific operation in that industry? (300 word limit) |
| |
| * Marketing Strategy |
| Please describe your go-to-market strategy. What is the role of partners and pilots? |
| Which partnerships and projects have you already confirmed? What is your distribution |
| strategy for your primary product? What is the time frame for key milestones for your penetration into the market? Where do you see the biggest challenges in achieving |
| your business plan and how do you think they can be overcome? |
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| 2012 Top 50 Competition |
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| * Competition |
| Competitors are one of the most important signs of an established market opportunity. |
| Please list the companies and services that you see as competition. |
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| * Team |
| Please describe the skills and experience of your key operational executives (not |
| including board members). Please indicate the qualifications and years of experience in |
| terms of technical, operations and business experience. (500 word limit) |
| Key dimensions: |
| -Track record: The accomplishments and failures they have experienced from the earliest point in their career |
| -Expertise: The skills, knowledge, and wisdom they have acquired |
| -Networks: The formal and informal links someone has developed during his/her career |
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| *; | Sources of capital: How have you funded your company to date? (Select one): |
|-----------|--|
| 0 | Raised less than (US) \$200K from any source |
| 0 | Raised over \$200K from any source |
| 0 | Raised between \$200K and \$500K from any source (specify sources) |
| 0 | Raised between \$500K and \$1M from any source (specify sources) |
| O part | Raised investment of over \$1M from a standard venture capital fund (a fund in which other funds and individuals has invested in a nership to make high-risk, high-return investments) |
| 0 | Raised over \$1M from all other non-NGO investors |
| 0 | Raised over \$1M in government or NGO grants |
| 0 | Raised over \$4M from a standard venture capital fund |
| 0 | Raised over \$4M from all other non-NGO investors |
| 0 | Raised over \$4M in government or NGO grants |
| 0 | Raised over \$10M from any source |
| */ | Annual revenues during the last twelve months (select one): |
| 0 | No revenues to date |
| 0 | First product sale |
| 0 | Over (US) \$100K |
| 0 | Less than \$500K |
| 0 | Over \$500K |
| 0 | Over \$1M |
| 0 | Over \$5M |
| Othe | er (please specify) |
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| 2012 Top 50 Competition |
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| Follow us on Twitter! Our handle is @artemis_project. |
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