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Innovative Infrastructure: Nanotechnology Centers

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Nanotechnology Centers

NanoCenters focus on early stage investments in nanotechnology projects and commercialize IP through licensing and start-up creation.

NanoCenters: Business Model

Science

Industry

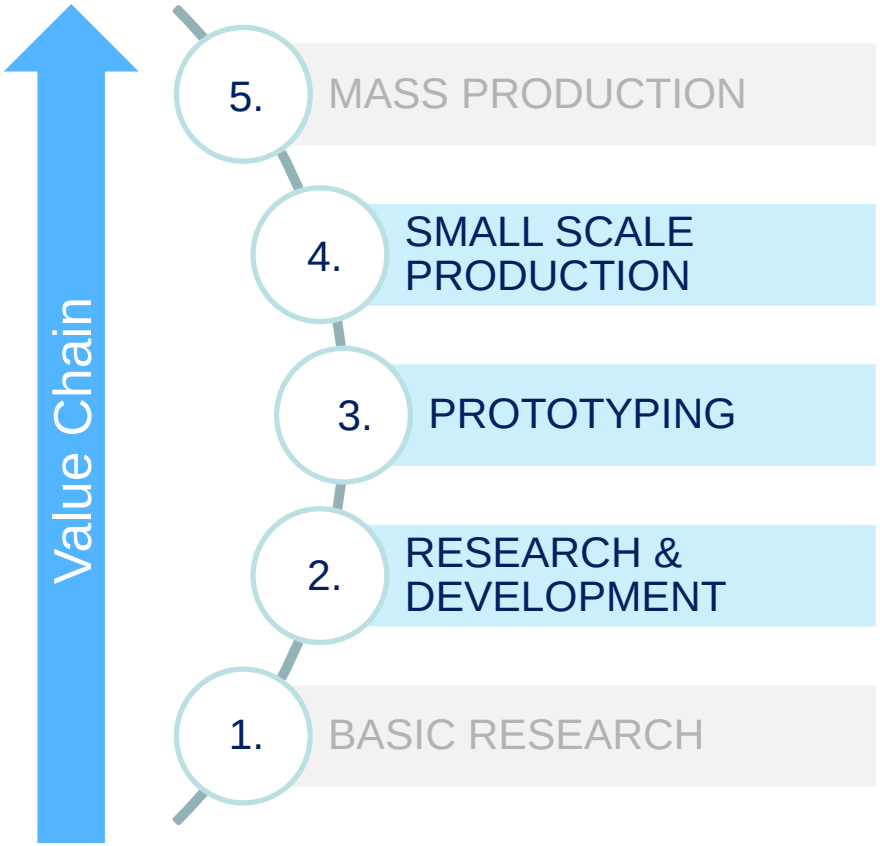
Basic R&D

NanoCenter

- Prototyping
- Business Formation
- Proof-of-Concept
- Education and Trainings
- International Cooperation

- Startups
- Licenses
- R&D
- Services

NanoCenters: Technology Transfer Role



Technology Transfer Department

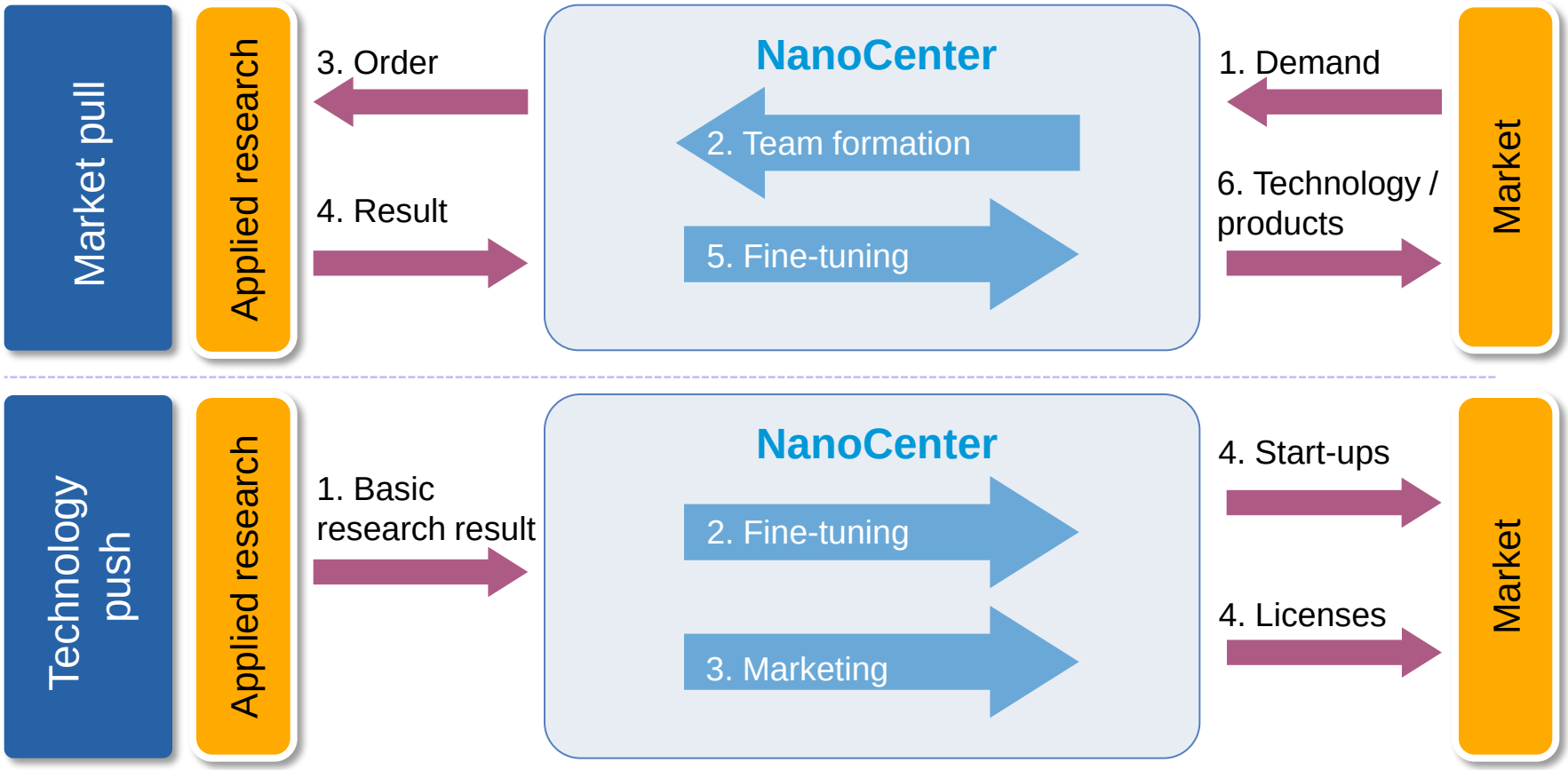
TTD provides support to the market and performs the following tasks:

1. Business model valuations;
2. Product feasibility studies;
3. Deal structuring.

Resources and facilities

1. Expertise;
2. Management team;
3. Fully equipped labs and specialized equipment.

NanoCenters: Commercialization Model

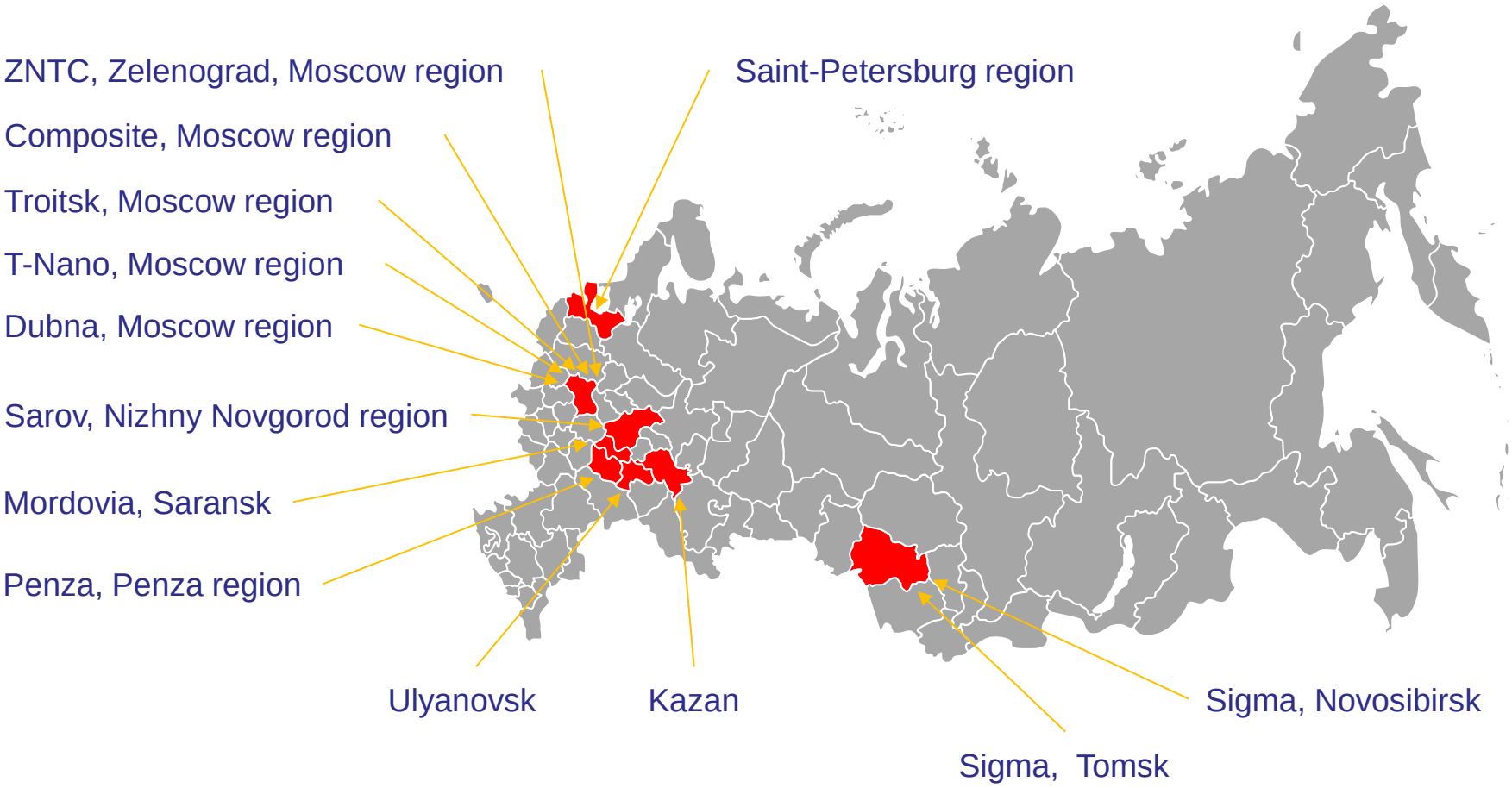


Nanocenters target existing demand by the market as well as yet-to-be-established markets and niches.

NanoCenters: Locations

Average NC budget: $ 80 million

- Equipment: $ 40 million
- OPEX: $ 13.4 million



NanoCenters: Key Figures

FIEP resources

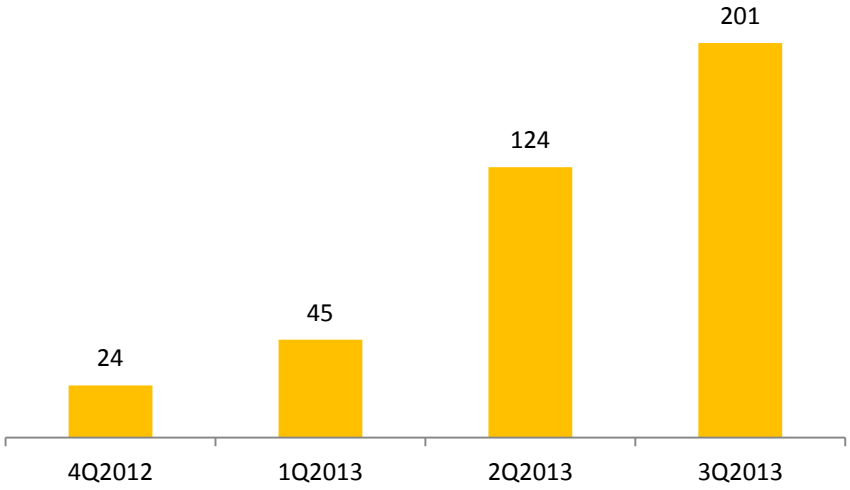
- ✓ Total budget of launched NCs: $ 786.6 million;
- ✓ FIEP investments YTD: $ 286.6 million;
- ✓ Co-investors investments YTD: $ 280 million.

2H2013 status:

- ✓ 11 opened NCs;
- ✓ Revenue: $ 12.17 million;
- ✓ 10 projects with international partners;
- ✓ 201 start-ups

KPI-2015

- ✓ Fully operational network of NCs;
- ✓ 400 start-ups;
- ✓ 250 licenses.



NanoCenters: Specializations

Центр нанотехнологий Республики Татарстан

Kazan

1. Oil and gas;
2. Low-volume chemistry;
3. Catalysts;
4. Composite materials.

SYGMA Novosibirsk

Sigma Novosibirsk:

1. Biomedical;
2. Instrument engineering;
3. New materials.

НЦК

Composite:

1. Composite materials.

НАНОЦЕНТР TECHNOSPARK

Troitsk:

1. Applied laser technology;
2. Artificial diamonds;
3. Technology support center;
4. New electronics;
5. Personal medicine.

SYGMA Tomsk

Sigma Tomsk:

1. Design and development of nanoelectronic components;
2. Biomedical;
3. Telecom;
4. Rad-tech.

ULNANOTECH

Ulyanovsk:

1. Construction and development;
2. Car-components;
3. Aviation and space industries.

NanoCenters: Specializations

T-Nano:

1. Design of nanoelctronics;
2. Semiconductors.

Dubna:

1. Rad-tech;
2. Functional nano-composites;
3. New materials;
4. Nano biotechnology.

Saransk:

1. Power electronics;
2. Light and LED;
3. Instrument engineering;
4. Construction and development

Saint-Petersburg:

1. Rad-tech;
2. Nanoelectronics;
3. Nanomaterials.

Zelenograd:

1. Micro- and nano-electronics;
2. Biotech;
3. Energy efficiency.

NanjCenters: Partners

DowChemical
Negotiations with Dow Aksa (Dow Chemical subsidiary) re Composite nanocenter investment. Initiated in 3Q2012, right now at the deal structuring and due diligence stage.

IMEC
Joint technology center with IMEC in Troitsk (agreement reached in 4Q2012). Planned for launch in 2013.

InterMolecular
R&D platform in thin films.

Support for Russian Scientists

The Fund encourages participation of US-based scientists of Russian origin in our projects.

We invite interested parties as:

- **Project contributors,**
- **Independent experts / estimators,**
- **Resident scientists,**
- **Company founders.**

Examples include: BiOptix Diagnostics Inc., BIND Therapeutics, Selecta BioSciences, SynBio, Joule Unlimited, BEBIG etc.

For more information, please visit: http://en.rusnano.com/portfolio/companies

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Thank you!

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