

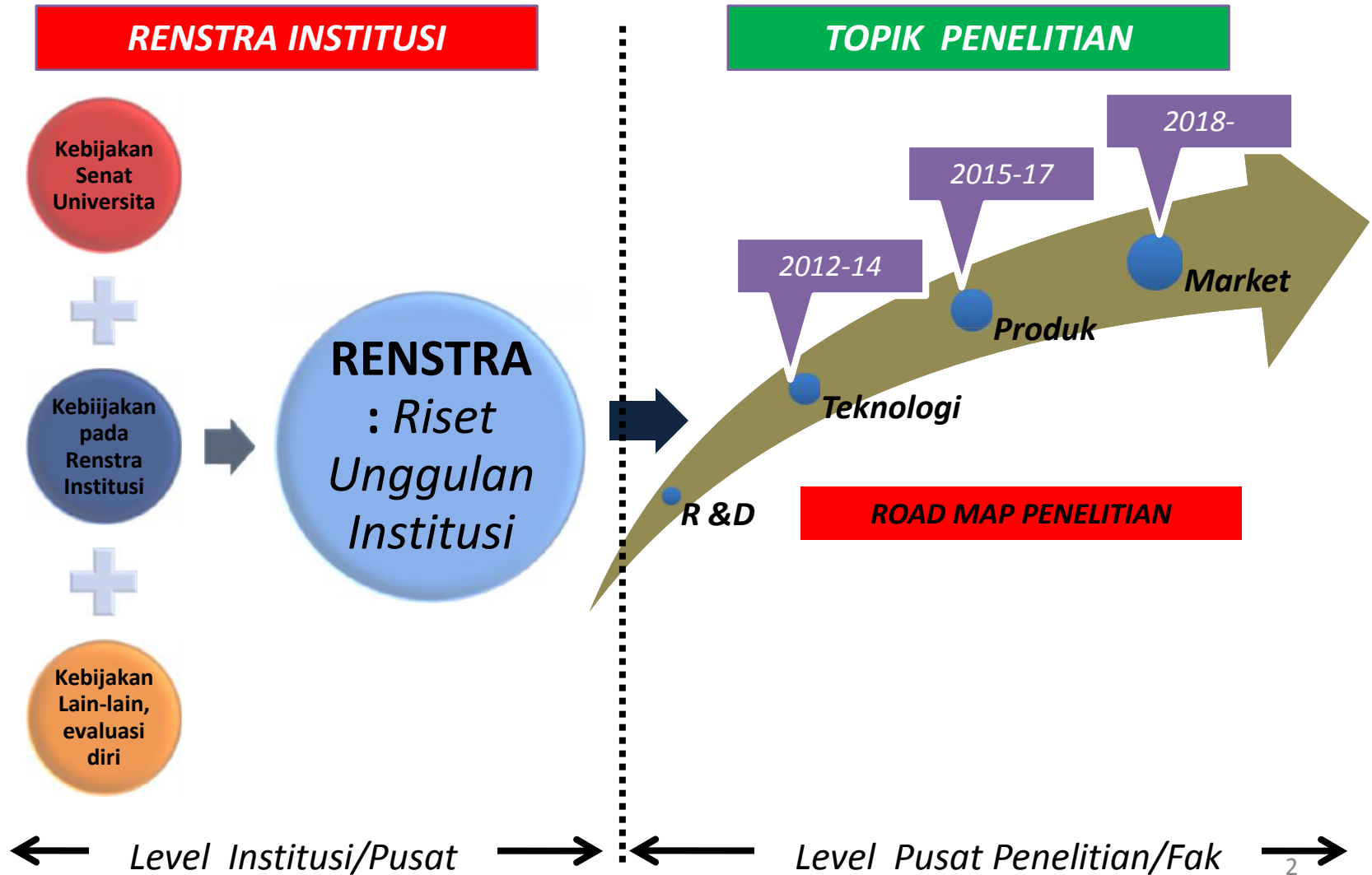
PETA JALAN PENELITIAN

Sumber : Pelatihan Reviewer Desentralisasi 2016



**Direktorat Riset dan Pengabdian Kepada Masyarakat
Kementerian RiTek dan Pendidikan Tinggi**

RENSTRA INSTITUSI – TOPIK dan ROAD MAP



PENDEKATAN PENYUSUNAN RENSTRA



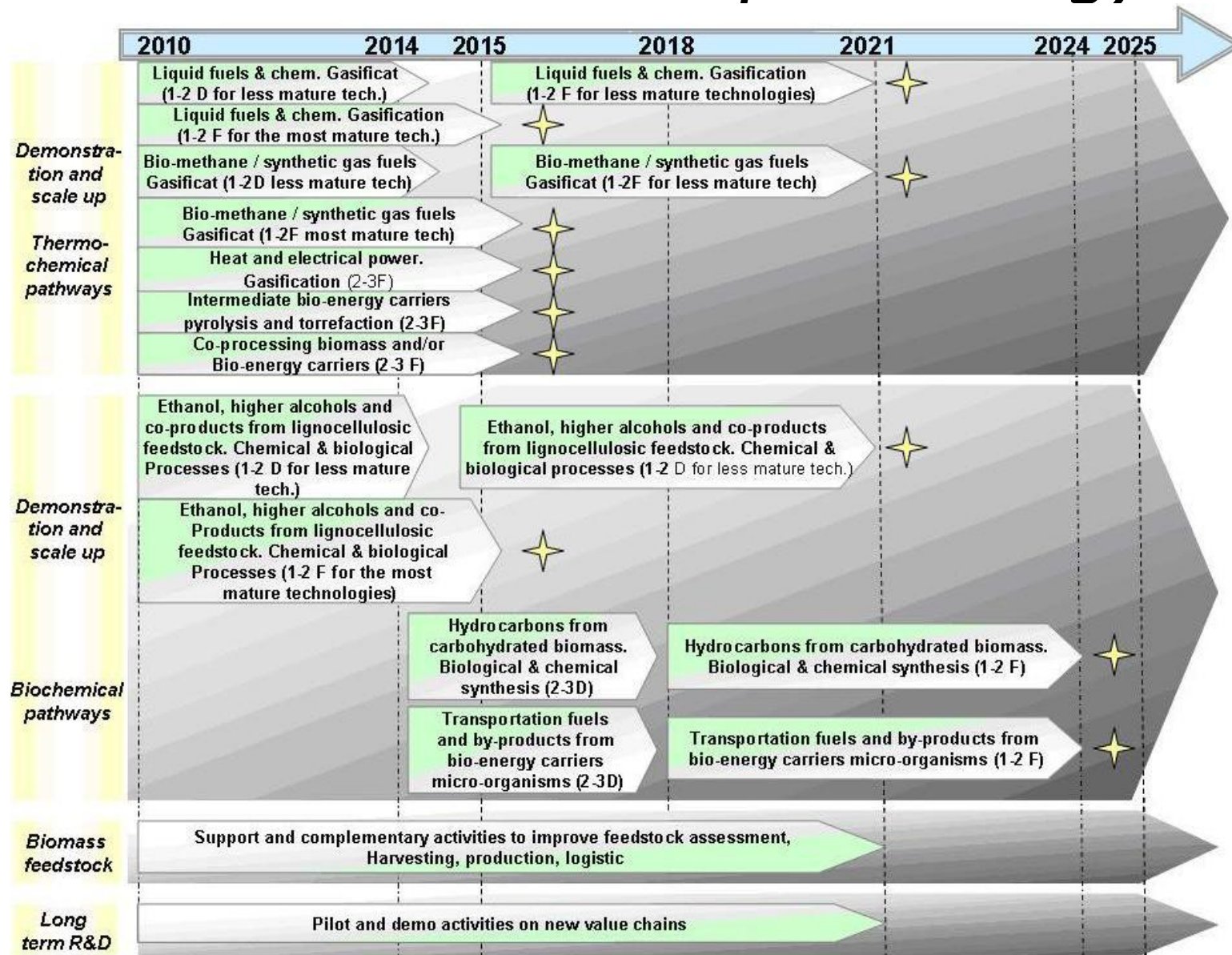
Sumber : ITB

PERUMUSAN TOPIK RISET DARI RISET UNGGULAN INSTITUSI

<i>Kompetensi/ Keahlian/ Keilmuan</i>	<i>Isu-Isu Strategis</i>	<i>Konsep Pemikiran</i>	<i>Pemecahan Masalah</i>	<i>Topik Riset Yang Diperlukan</i>
1. Teknik	1.	1.	1.	1.
2. Kesehatan	1. 2.			
3. Pertanian	1. 2. 3.			
4. Hukum	1. 2. 3.			
5. MIPA	1. 2.			
6. Agama	1.	1.	1.	1.



Contoh Road Map Bioenergy



Contoh Kasus :
Pengembangan Road Map Pada Pusat
Penelitian Bioteknologi-ITB

**RISET UNGGULAN ITB :
RISET PRIORITAS ITB**

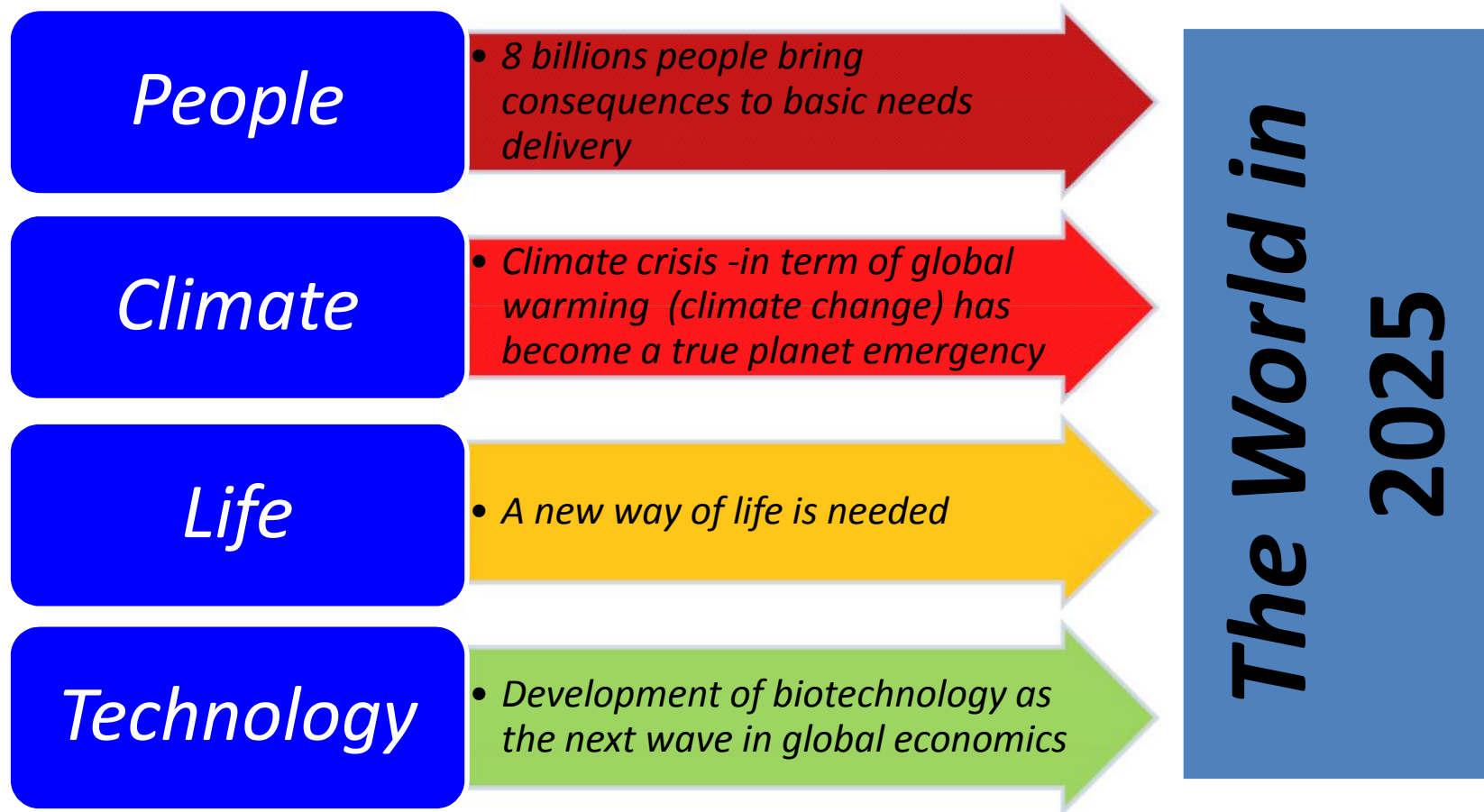
1. Penelitian Energi;
2. Penelitian Pangan, Obat dan Kesehatan;
3. Penelitian Teknologi Informasi dan Komunikasi;
4. Penelitian Wilayah, Infrastruktur dan Lingkungan;
5. Penelitian Produk, Budaya, dan Lingkungan;
6. Penelitian Bioteknologi;
7. Penelitian Nanoteknologi dan Rekayasa Kuantum;
8. Penelitian Mitigasi Bencana.



PUSAT PENELITIAN
BIOTEKNOLOGI-ITB



Problem & Future





Research Question

R & D

- How to develop research and development and the application of the R&D products in unleashing the natural resources potentials, primarily biodiversity, in value added framework

Dissemination of Research

- How to push forward the dissemination of biotechnology research findings to the industries and at the same time improve research finding in order to boost national industries' autonomy to be able to compete in global world

Prioritize

How to prioritize biotechnology division to a better and prompt result

Intellectual Property Right

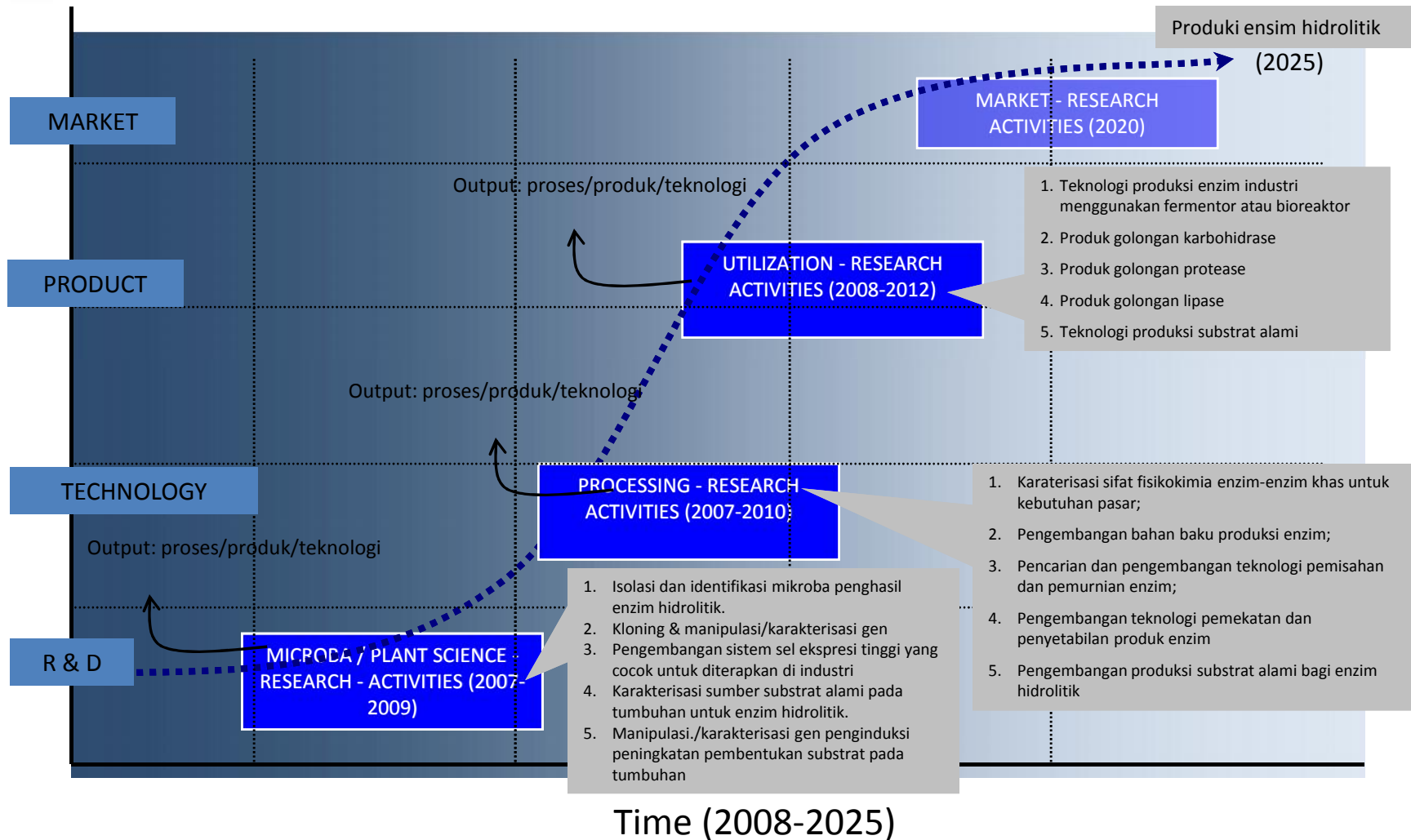
- How to expand the network globally and the issue of intellectual property right

Human Resources

- How to enrich the skill and knowledge of biotechnology human resources

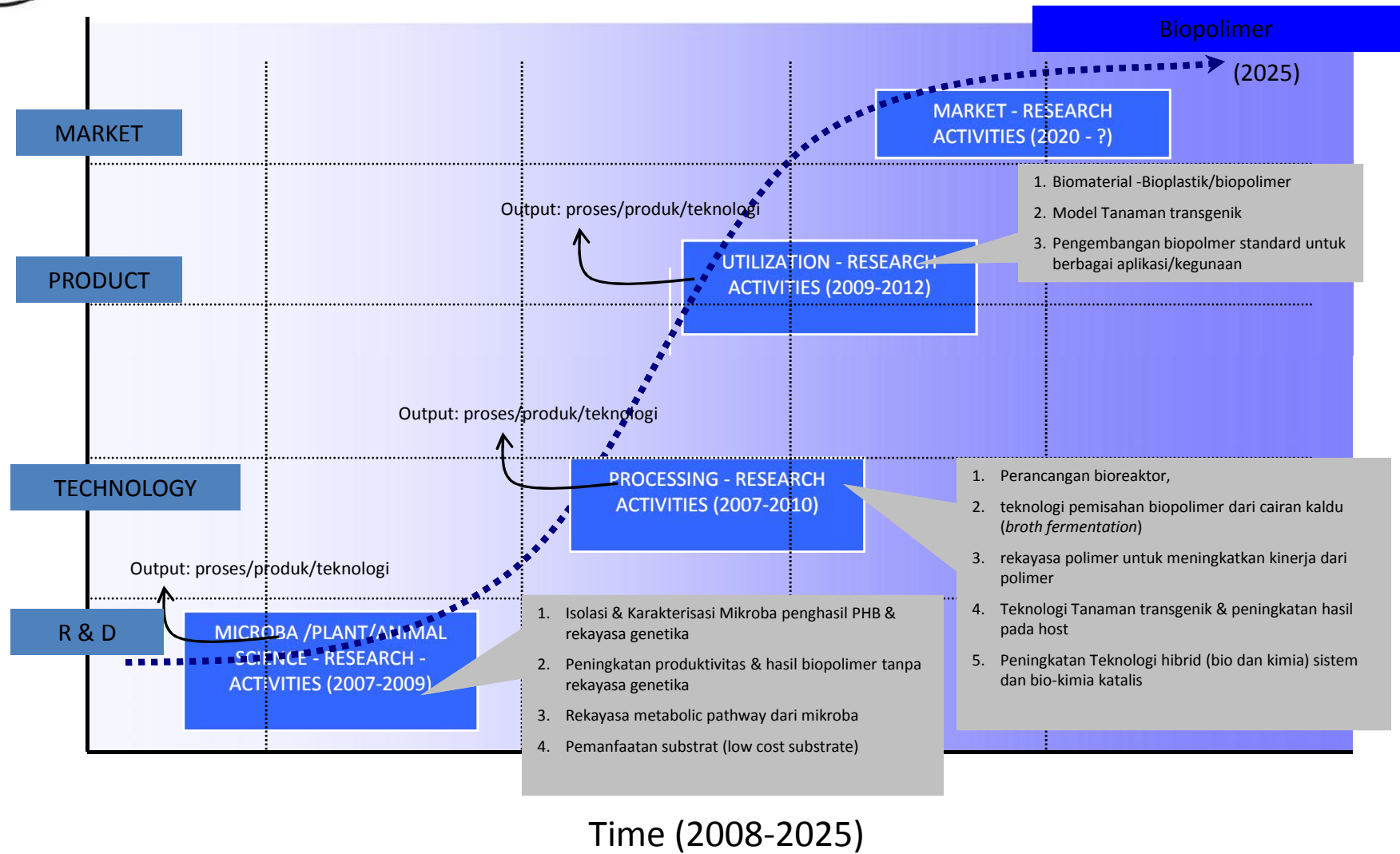


Enzyme Production



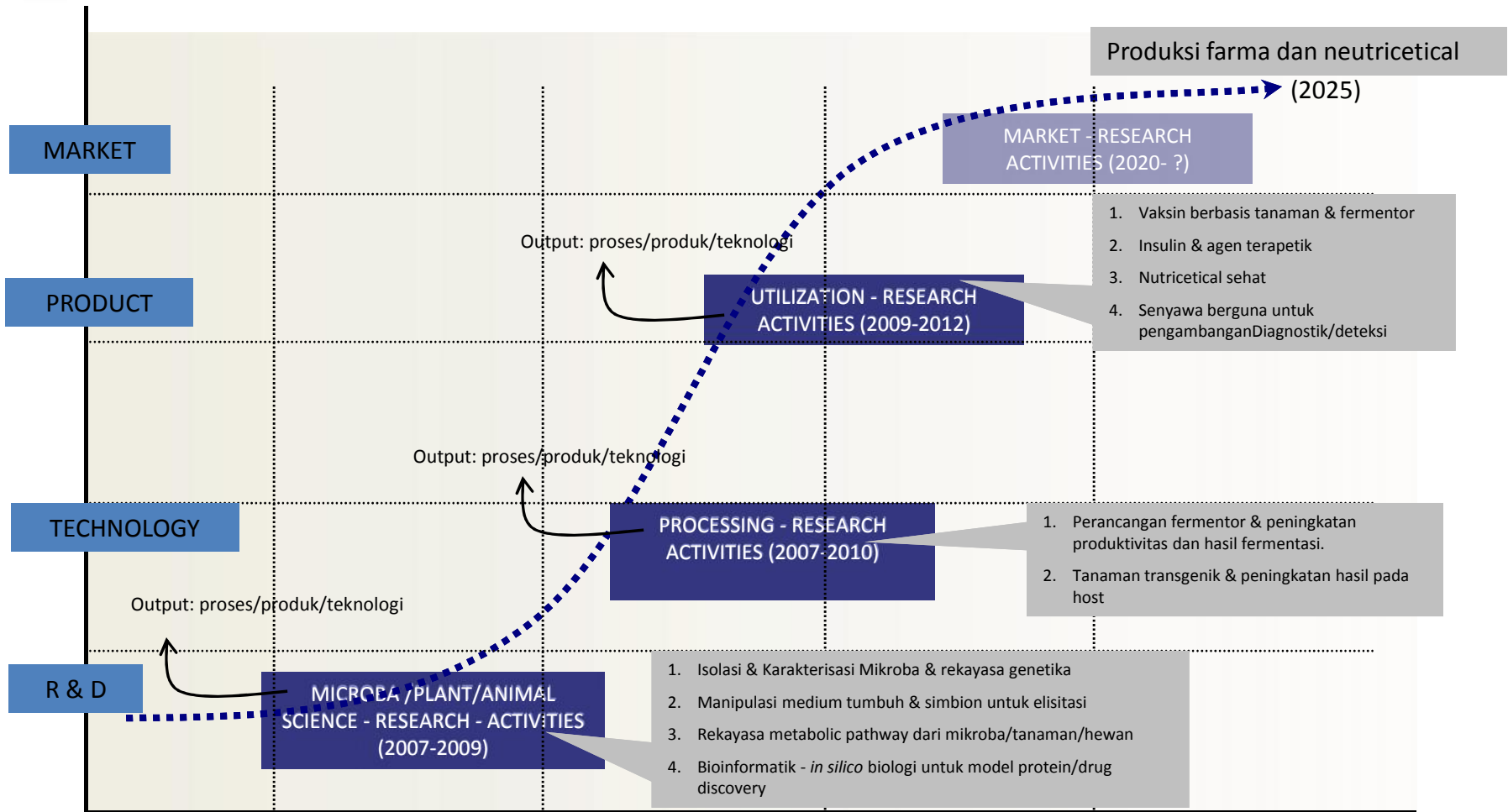


New Biomaterial Production





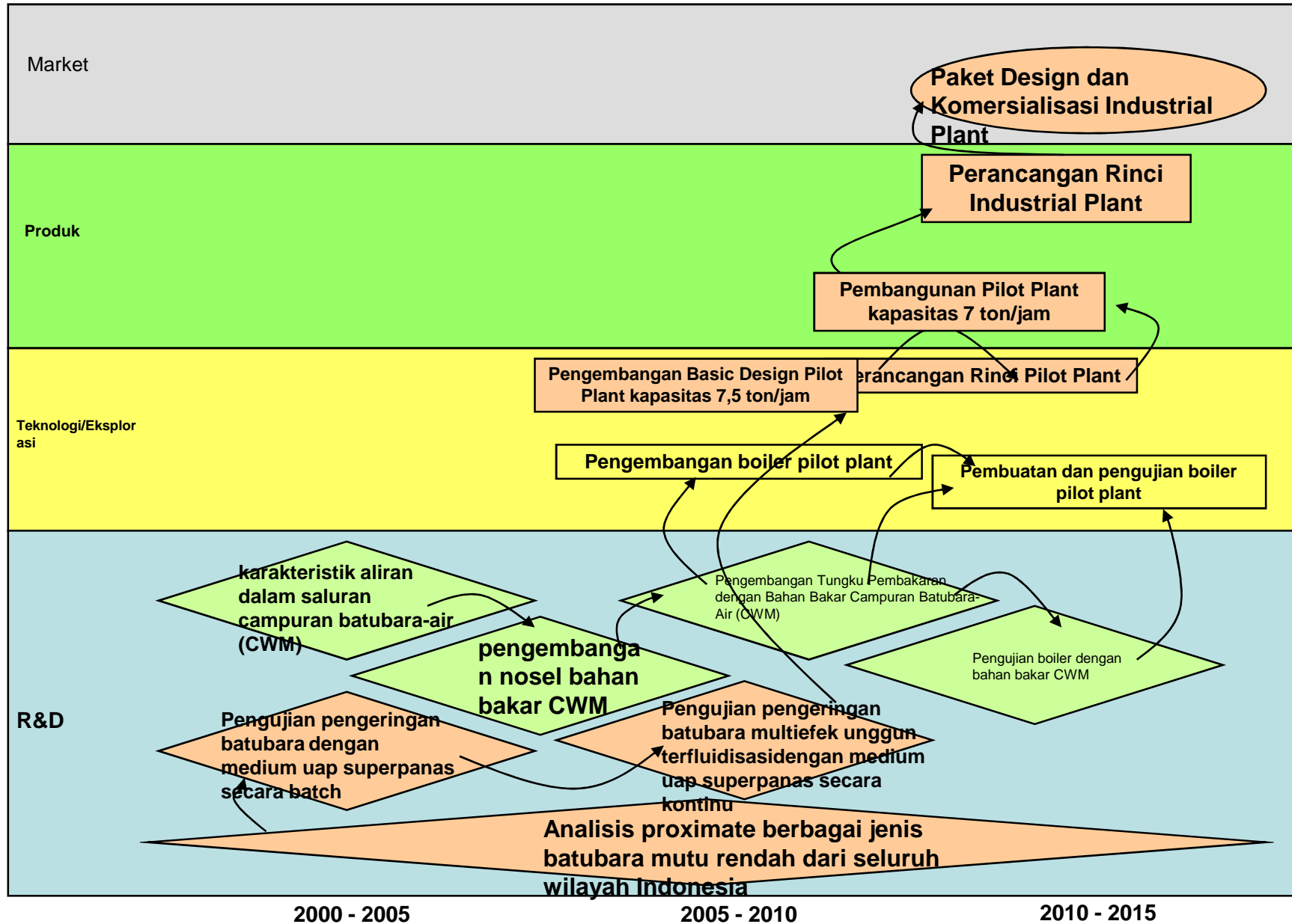
Pharma and Neutricetical Production



Time (2008-2025)

Road Map on Coal Upgrading

Pusat Penelitian Energi



2012-2016

Pusat Penelitian Produk Budaya dan Lingkungan

1. Riset 'CORE CREATIVE'

- Identifikasi potensi menuju Knowledge Management (KM)- Sumber Daya Nusantara.
- Menggali dan menafsirkan ulang kekayaan seni budaya.
- Menggali nilai tambah tangible & intangible resources melalui seni dan desain.



2. Riset PRODUKSI

- Menciptakan aktifitas produksi yang efektif dan efisien (sistem, alat dan teknologi).
- Menanamkan prinsip dan proses kerja pada unit produksi.
- Sinergi potensi produksi dalam penumbuhan dan perluasan usaha.



3. Riset DIFUSI DAN PASAR

- Mencari dan mengembangkan permintaan pasar lokal/global.
- Mengkaji kecenderungan, dan gaya hidup masyarakat/konsumen.



4. Riset 'WIDER ECONOMY'

- Mengkaji potensi daya tarik 'cultural tourism, heritage, cultural ceremonies'.
- Menumbuh kembangkan aktivitas sosio-kultural

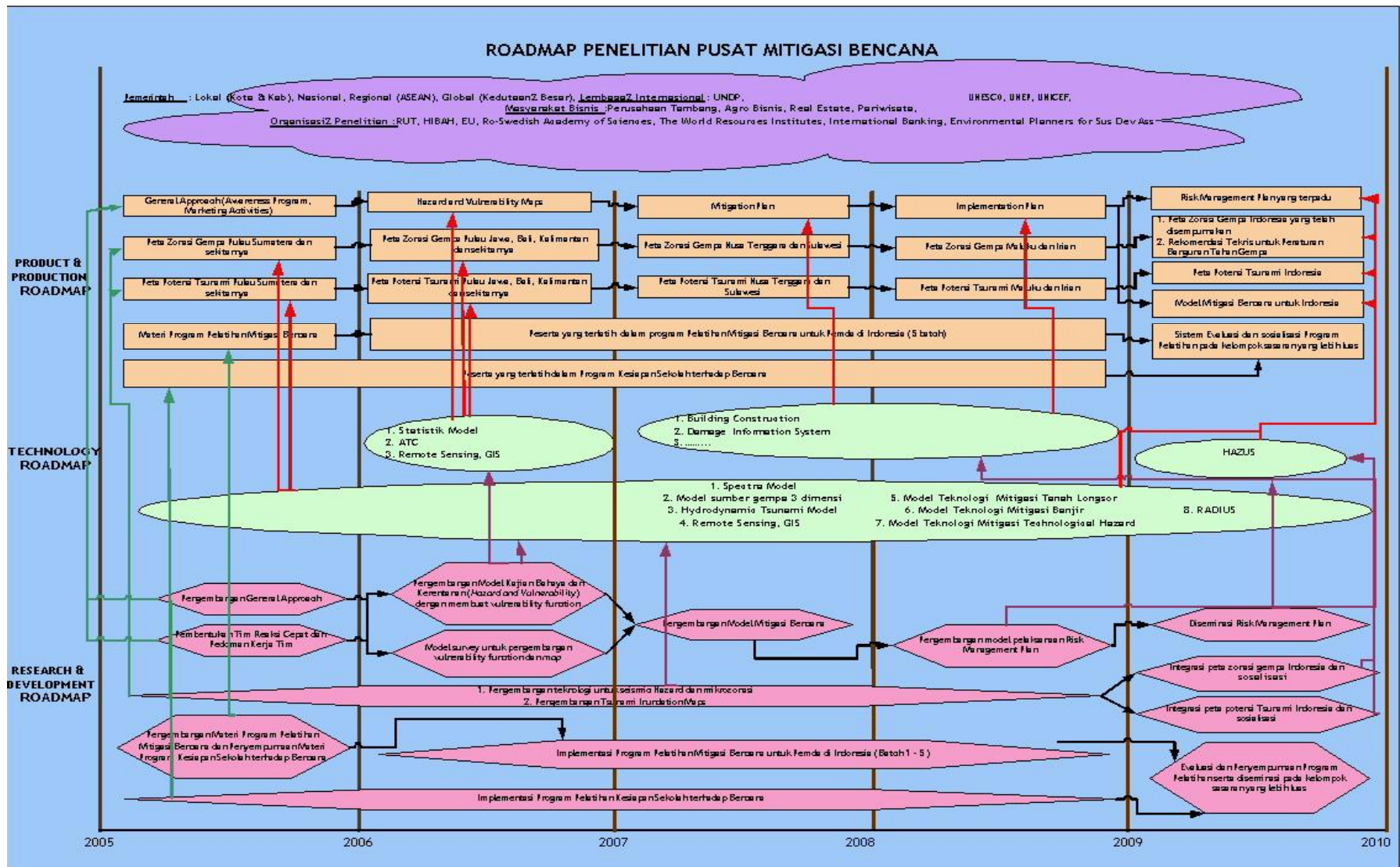


PPMB ITB

Pusat Penelitian Mitigasi Bencana

Research Center for Disaster Mitigation

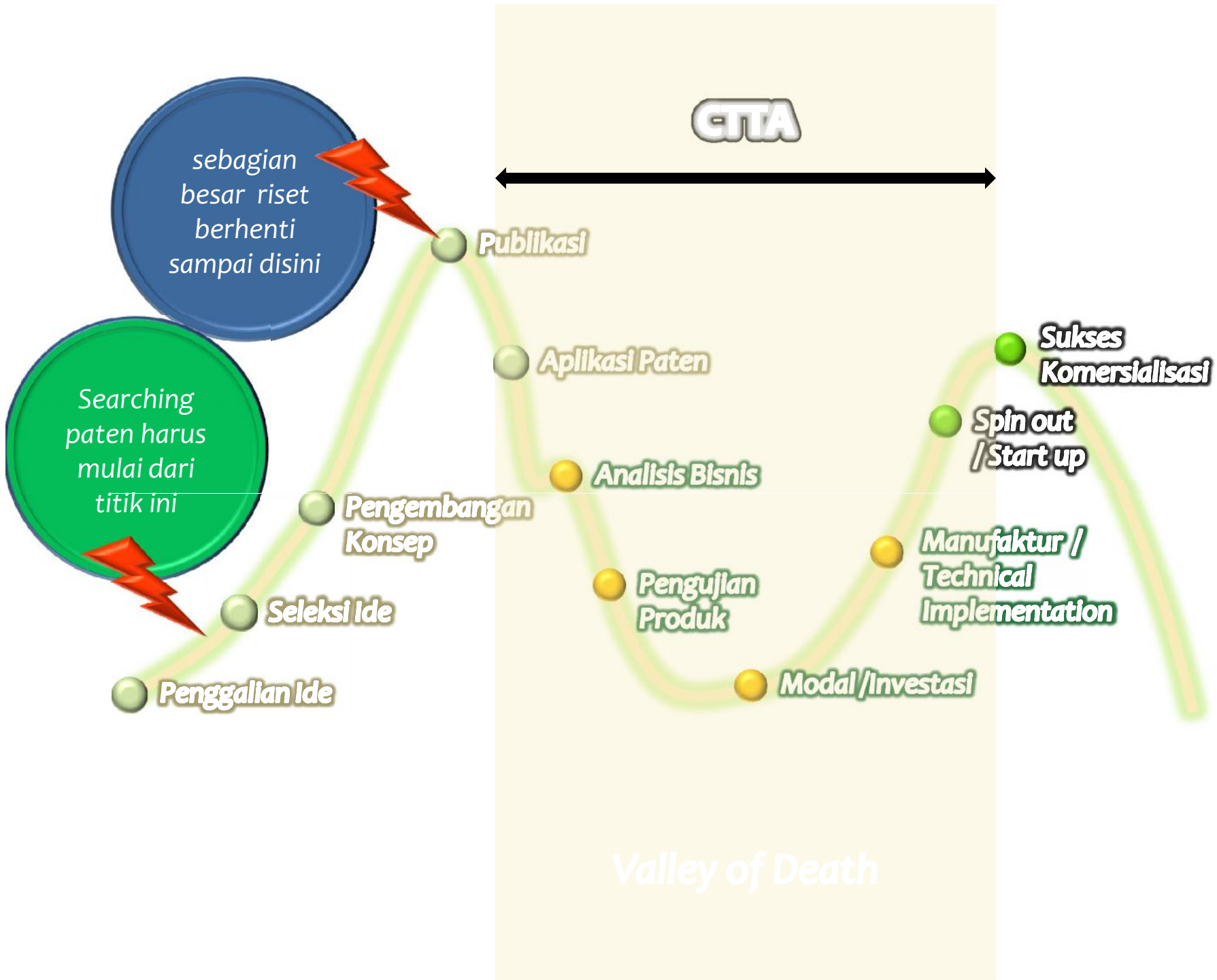
Prof. Masyhur Irsyam



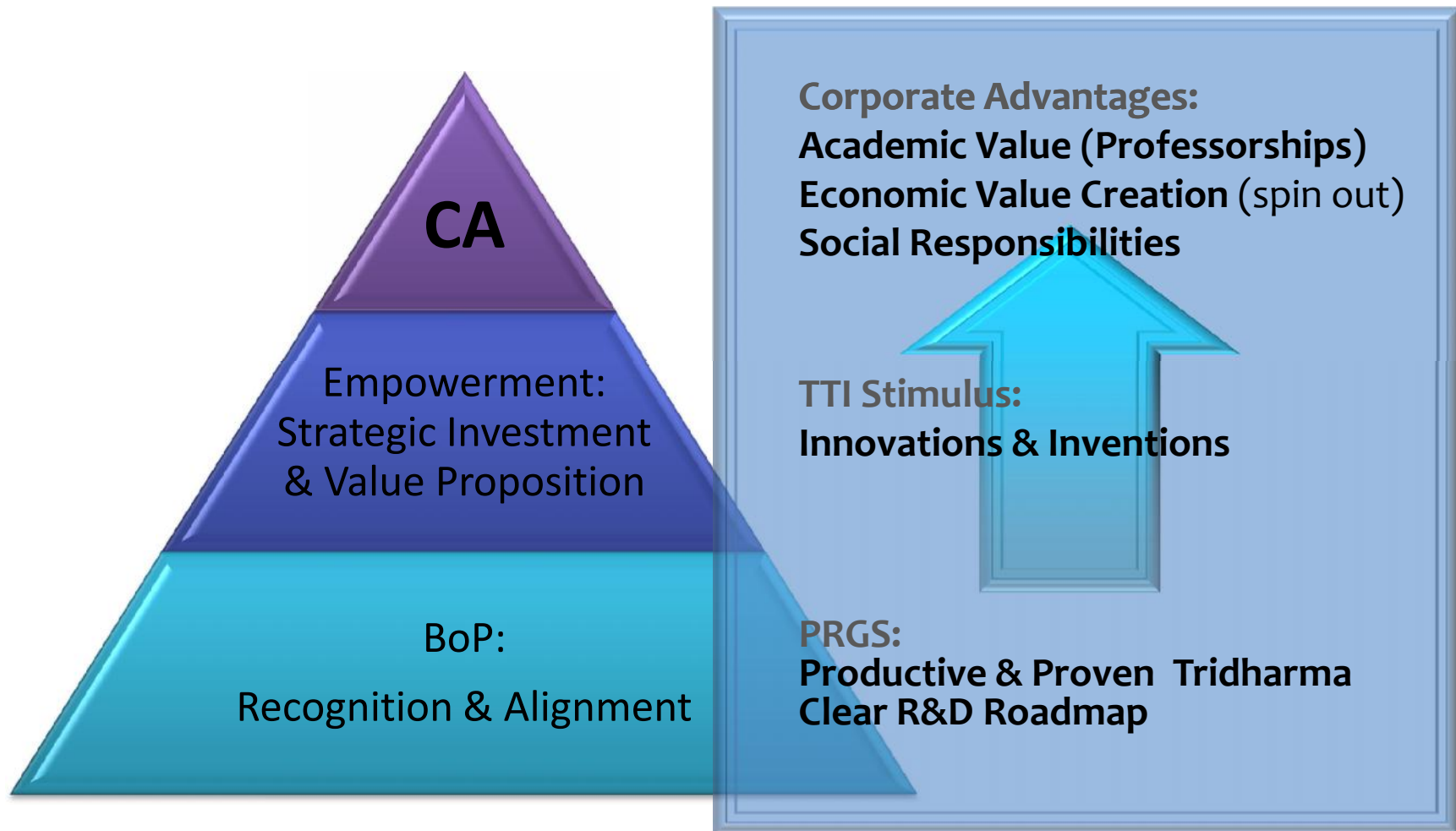
Sistem inovasi & skema riset strategis uns solo: *model berbasis grup di fmipa*

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**Development Strategy:
Fortune in the Bottom of Pyramid**



In the Bottom of Pyramid:
Recognition and Alignment

Tiga Penyumbang Utama Pencapaian Riset UNS:
MIPA, Teknik, dan Pertanian
(mencapai 65% dari total pencapaian)

Potensi Lain:
**Kependidikan, humaniora termasuk Gender, serta
local wisdom Javanology**

In the Bottom of Pyramid:
Recognition and Alignment (2)

Potensi Riset Terfokus

- ☑ **Rekayasa Bahan Maju & Teknologi Modular**
Renewable Energy (disupport oleh lebih dari 30 Dr di FMIPA, Teknik, dan FKIP)
- ☑ **Integrated Life and Environmental Sciences for Sustainable Development** (disupport oleh lebih 40 Dr di FMIPA, Pertanian, Teknik, FKIP, dan FK)
- ☑ **Humaniora dan Javanology** (lots of Prof. and Dr)

Keywords:

Blending of State of the art and local wisdom

Pyramid Management Model

Four Major Impact

No Past, but
Present &
Future



this is our point

Solusi Serempak UNS dalam Perspektif EU



**Economic Value Creation
Funding Scheme:**

Chance for divers peoples



Innovations & Inventions

**Productive & Proven Tridharma
Clear R&D Roadmap**

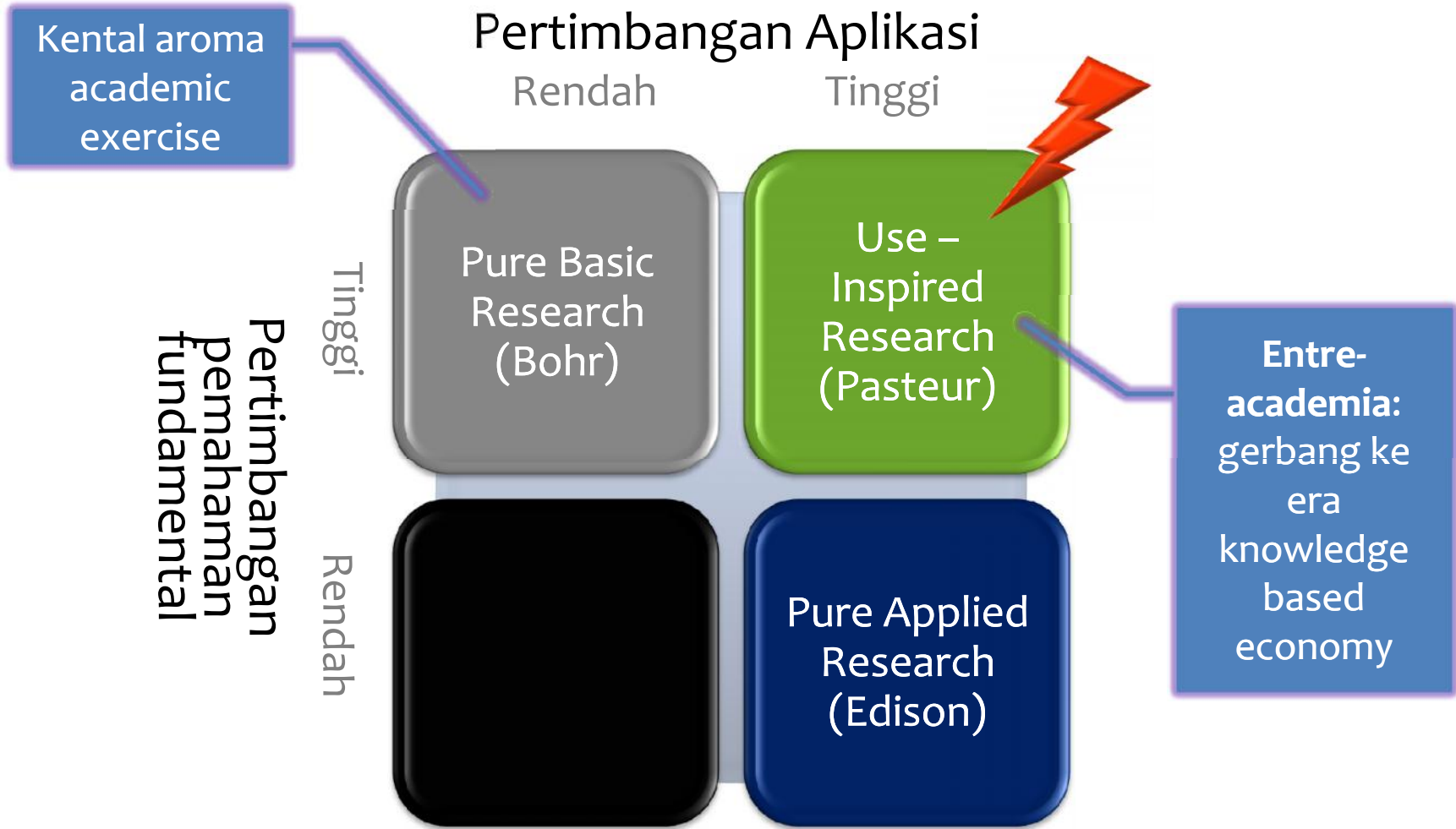
Pyramid Management Model

First think First: Total Migration



Center of Excellences Value

Proposal for Research Policy & the Steps to go there



Inspirasi Pelaksanaan Riset
Quadrant Model of Scientific Research

**3rd Step:
to grow and establish**



**need a very strong spirit and commitment from
all of scholars to make it real..!**

to grow and establish



2010/2011: Settling Process

Key Indicators:

- Settling Research Groups and Department RKIJs
- Clear Roadmap & Rule of Conduct (SOPs)

Funding Scheme:

- TTI Stimulus: Fully SBIR & TTI P2M

to grow and establish



2012/2015:

Pertumbuhan Tahap I

Key Indicators:

- R&D network initiation
- Strong network for community services

Funding Scheme:

- TTI Stimulus: SBIR (60%), ARTP (40%) & TTI P2M

to grow and establish



2016/2020:

Pertumbuhan Tahap II

Key Indicators:

- Strong achievement on R&D & Community Services (including high growth on int'l publications and patent app.)
 - Promoting R&D based Revenue Generating

Funding Scheme:

- TTI Stimulus: SBIR (40%), ARTP (60%) & TTI P2M

to grow and establish



**2021 - :
Establish**

Key Indicators:

- Comply with World Class University Indicators
- Spin off Initiation

Funding Scheme:

- TTI Stimulus: SBIR (25%), ARTP (50%), IIB (25%)
& TTI P2M