Annex B. PRESENTATIONS FROM SPEAKERS

工業技術研究院
Industrial Technology
Research Institute

Chinese Taipei Efforts on Helping SME to Expand Green Technology Market

Ren-Chain (Joseph) Wang
Green Energy and Environment Research Laboratories (GEL)
Industrial Technology Research Institute (ITRI)

Sept 28, 2011

International Workshop and Training on The Role of Business Incubators in Developing Green Technology-Based SME
(APEC SME 04 2011A)

Copyright 2011 ITRI工業技術研究院

Outline

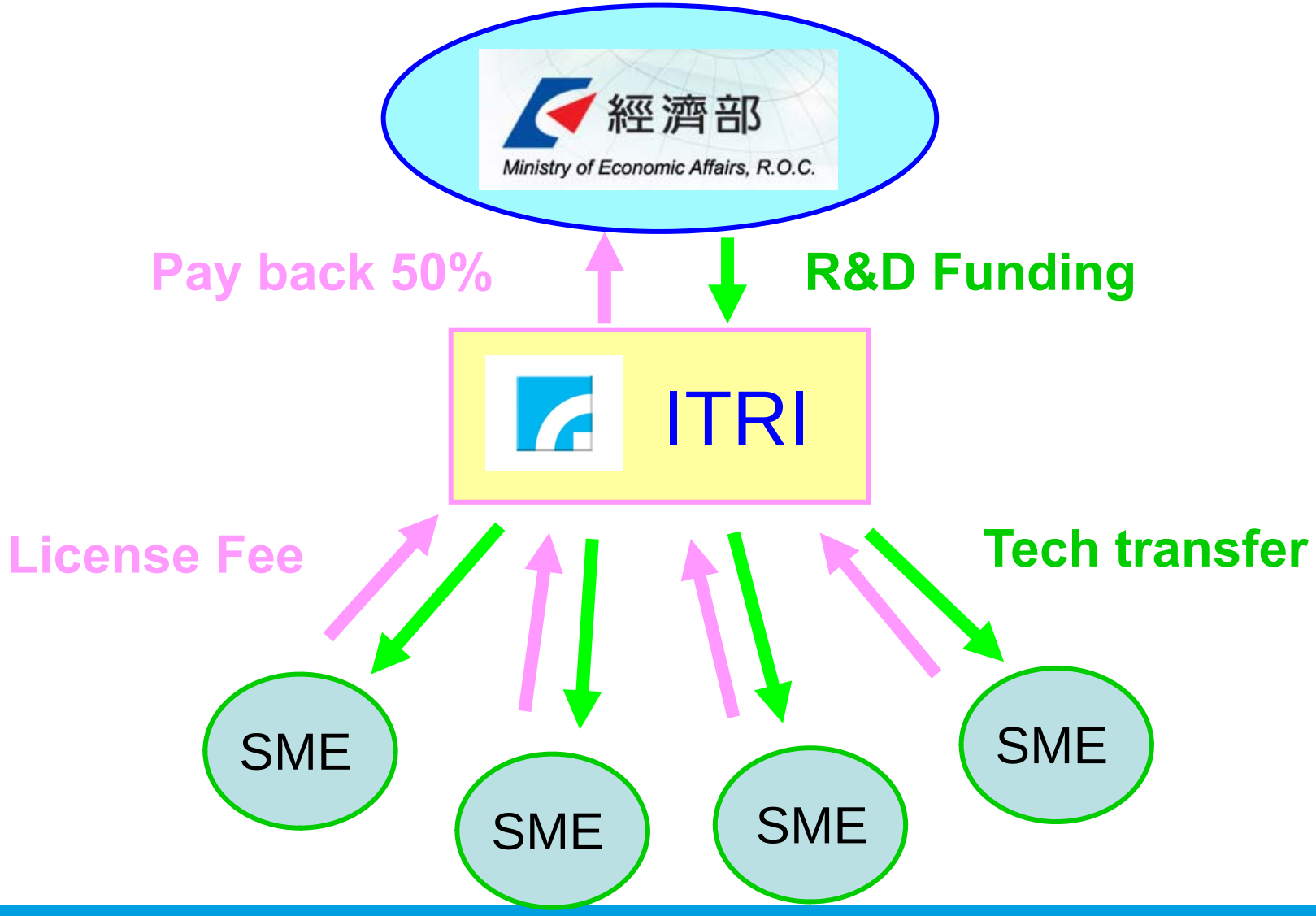
- Overview of ITRI's Roles in Helping Green Technology Development
- Chinese Taipei Government's Programs on Expanding Green Technology Applications
- ITRI's Efforts on Expanding Green Technology Applications
- Conclusions

Copyright 2011 ITRI工業技術研究院

- **Overview of ITRI's Roles in Helping Green Technology Development**
- Chinese Taipei Government's Programs on Expanding Green Technology Applications
- ITRI's Efforts on Expanding Green Technology Applications
- Conclusions

Copyright 2011 ITRI工業技術研究院

ITRI's Role in Technology Development for SME – A Two Way Process



Copyright 2011 ITRI工業技術研究院

工業技術研究院
Industrial Technology
Research Institute

ITRI Overview

Staff：5,625

Ph. D.：1,219

M.S.：3,059

Patents

15,847

Spin-off

Tech transfer： 70

Incubation：167

Service (2010)

Company：15,139

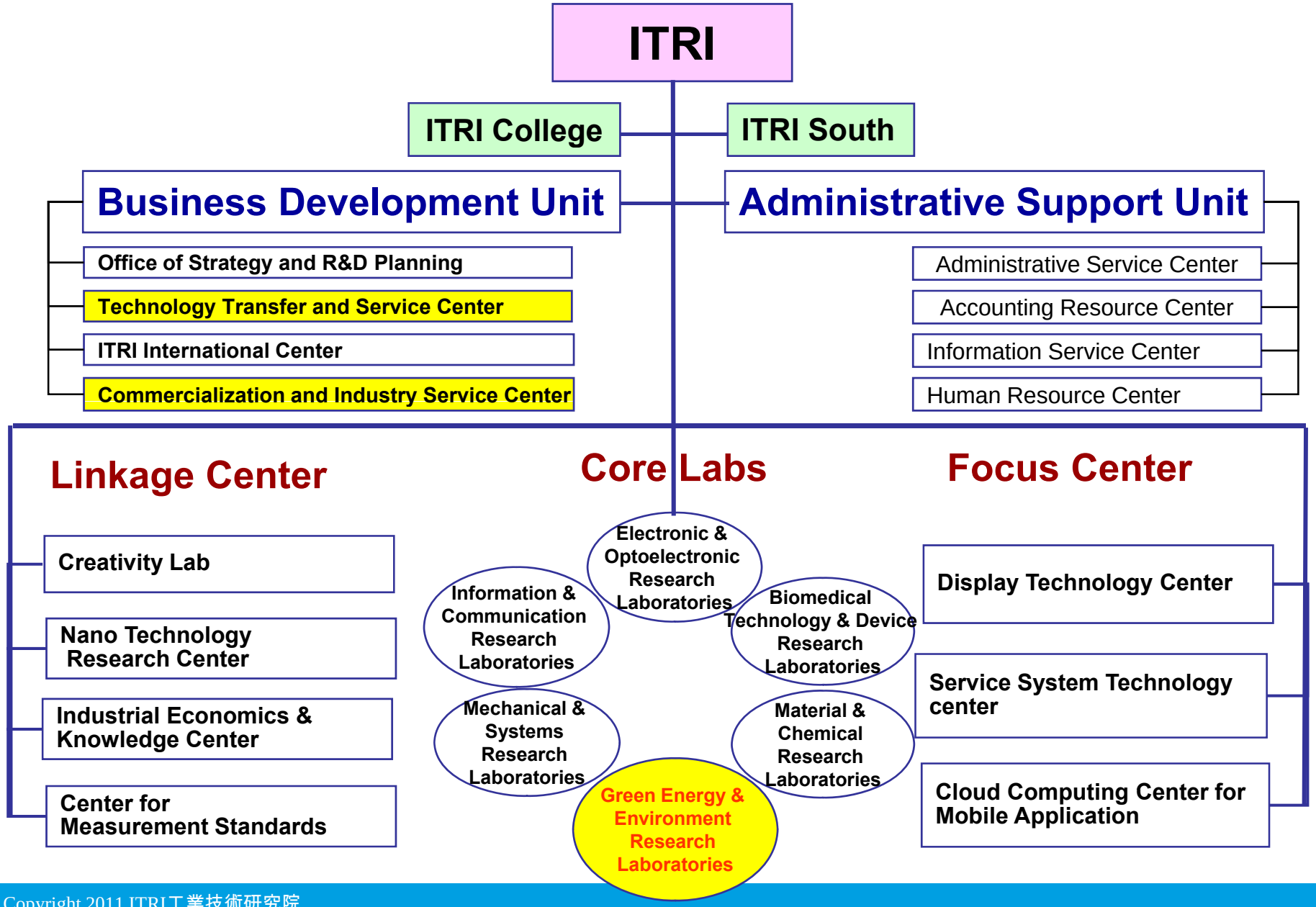
Licensing：695

(2011.8.1)

Copyright 2011 ITRI工業技術研究院

工業技術研究院
Industrial Technology Research Institute

ITRI Units



Copyright 2011 ITRI工業技術研究院

工業技術研究院
Industrial Technology Research Institute

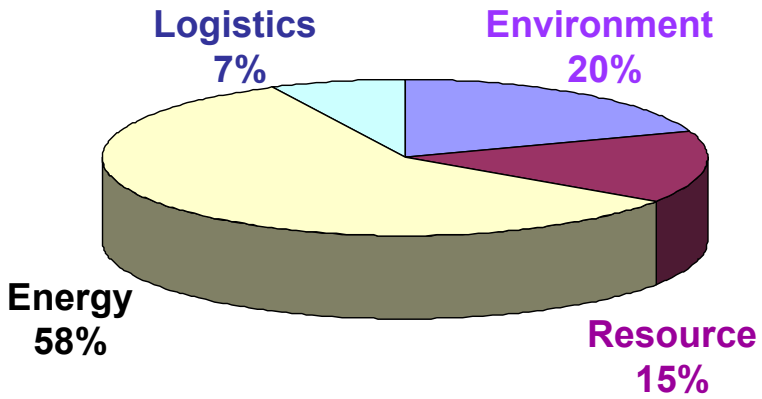
GEL Organization and Human Resources

GEL (733)

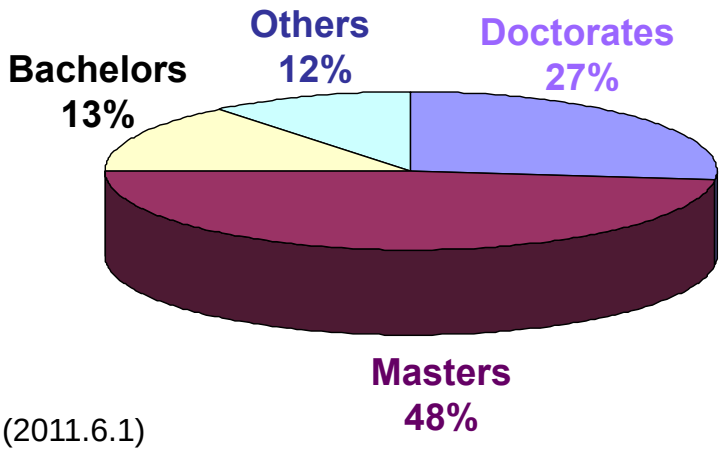
- **Industrial Safety and Quality Office (7)**

- New Energy Technology Division (85)
- Intelligent Energy-Saving Systems Division (112)
- Natural Resources Technology Division (111)
- Environmental and Safety Technology Division (75)
- Water Technology Division (71)
- Electric Energy Technology Division (62)
- Photovoltaic Technology Division (81)
- Green Industry Development and Promotion Division (70)
- Planning and Business Development Division (35)

Focus Areas



Education



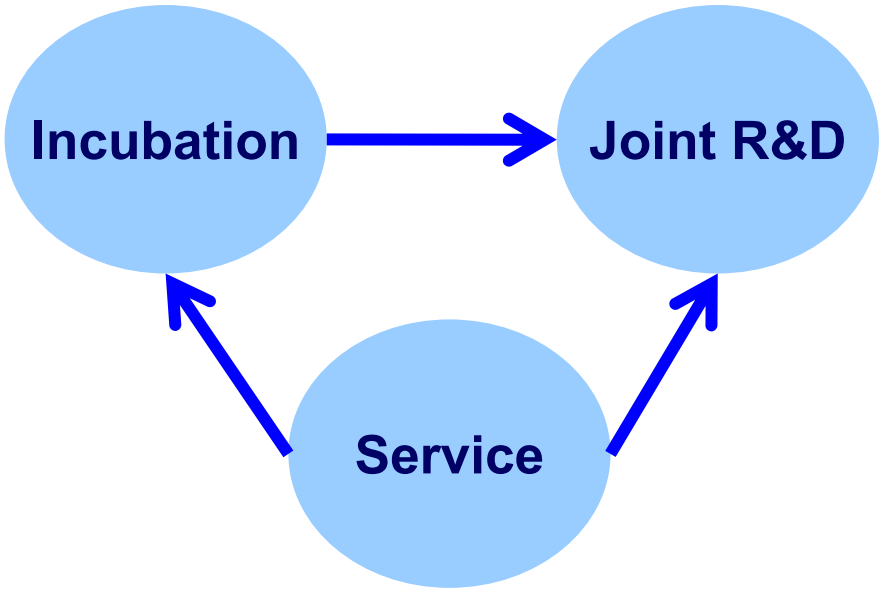
(2011.6.1)

Copyright 2011 ITRI工業技術研究院

Three Types of Tenants in CIS Open Lab

- Age<18 months
- Initial Capital<NT$80million
- Period=3+1 years
- Now: **17**

- Joint R&D Contract with Labs/Centers
- Foreign Entity Allowed
- Now：**39**



- IP/ Industry Association/ ID
- Now：**11**

Copyright 2011 ITRI工業技術研究院

- Overview of ITRI's Roles in Helping Green Technology Development
- **Chinese Taipei Government's Programs on Expanding Green Technology Applications**
- ITRI's Efforts on Expanding Green Technology Applications
- Conclusions

Copyright 2011 ITRI工業技術研究院

工業技術研究院
Industrial Technology Research Institute

Low Carbon Island Field Demonstration

- Background
  - To illustrate the feasibility and impact of green technologies as well as the growth of green industry and job opportunities
- Platform
  - Offshore island field demonstration (Peng Hu Islands)
- Participants
  - Central and local governments, ITRI
  - Private industry including green technology, construction, tourism, and transportation
- Funding
  - A total of 330 millions USD from both government and private sources
- Benefits
  - Over 55% of the energy from renewable
  - Carbon emission reduced by 62% (332,000 tons/year)

Environmental Protection Technology Park

- **Background**
  - To promote the recycling and reuse of resources and to help the growth of local environmental protection industry
- **Platform**
  - Four environmental protection technology parks in Kaoshyung, Hualien, Tainan, and Taoyuan
- **Participants**
  - Permits granted to 68 companies including green energy, precious metal reclamation, electronic product recycling, plastic recycling etc.
- **Funding**
  - Environmental Protection Administration and private companies
- **Benefits**
  - Enhance environmental protection technology level and impacts through cluster effects
  - Increase recycle, reclaim, and reuse; reduce waste and better use of resources
  - A total capital investment of about 650 millions USD, generated 2,578 green jobs, and eliminated wasting 2.5 million tons of resources

Copyright 2011 ITRI工業技術研究院

Energy Efficiency Labeling/Energy Saving Certificate

- **Background**
  - To enhance technology level of local air-conditioning, lighting, dehumidification, and related industries
- **Platform**
  - Mandatory energy efficiency labeling system: MEPS for 8 high energy consuming products such as air-conditioner, refrigerator, and light bulb
  - Voluntary energy saving certificate：Leading the world in energy efficiency testing in drinking water machine, hair dryer, and hand dryer
- **Participants**
  - Government, ITRI, and industry
- **Funding**
  - Bureau of Energy
- **Benefits**
  - Mandatory energy efficiency labeling: To promote 15 MEPS in the near future. Accumulatively 10 million tons of carbon emission can be eliminated by 2020.
  - Voluntary energy saving certificate: Certificate standards for 29 home appliances, lightings, autos, scooters, and office equipment are announced. Till the end of 2010, 285 companies have been qualified for energy saving certificates on 4,460 products. Accumulative 86.9 million pieces of products with certificate have been sold and annual energy saving reach 150,000 KLOE since 2005.

Copyright 2011 ITRI工業技術研究院

Subsidy for Purchasing Products with Energy Saving Certificate

- **Background**
  - Economy Reviving Act in which incentives are provided for the purchasing of energy saving home appliances
- **Platform**
  - The Subsidy Measure for Purchasing Domestically Produced Home Appliances (October 2008 to March 2010)
- **Participants**
  - Government, ITRI, home appliance manufacturers
- **Funding**
  - Bureau of Energy
- **Benefits**
  - Increased home appliances production by 27 millions USD
  - Saved 39.50 GWh electricity annually
  - Eliminated 25,119 tons of carbon emission per year

Copyright 2011 ITRI工業技術研究院

Green Electronics Integration Platform

- **Background**
  - In response to the EU's Energy Using Products Directive (EuP)
- **Platform**
  - The "Integrated Electronic and Electric Industry EuP Service Platform" contains the most up-date and complete ISO and eco characteristics data bank for a wide span of electronics and electric components. A web site is also constructed to provide convenient services.
- **Participants**
  - MOEA、related industries, ITRI
- **Funding**
  - (DoIT (MOEA)
- **Benefits**
  - Successfully help Chinese Taipei related industry to meet the EuP directive and prevail in global market
  - The Eco-profile in the platform is also utilized in calculating product carbon footprint

- Overview of ITRI's Roles in Helping Green Technology Development
- Chinese Taipei Government's Programs on Expanding Green Technology Applications
- **ITRI's Efforts on Expanding Green Technology Applications**
- Conclusions

Copyright 2011 ITRI工業技術研究院

工業技術研究院
Industrial Technology Research Institute

Motor Control Application Alliance

- **Background**
  - To enhance the system integration and key control technology of Chinese Taipei electric industry to increase motor efficiency
- **Members：**
  - ITRI, MIRDC
  - China Steel, Rechi Preision, Hanbell Screw Technology, TECO, and others
  - National Cheng Kung University
- **Green benefits**
  - Increase motor efficiency by 10% and save 10 GWh electricity annually
  - Larger global market share

Copyright 2011 ITRI工業技術研究院

工業技術研究院
Industrial Technology
Research Institute

Cooperation, Alliance, and Symposium

Zero Energy Building Technology Alliance (ZEBTA)

2011.6. 24 Taipei Chinese Taipei

International Symposium on Smart Grids

2010.9.14 ,Taipei Chinese Taipei

2010 Cross-strait Renewable Industry Cooperation and Exchanges

2010.7.27 Nanjing China

Copyright 2011 ITRI工業技術研究院

工業技術研究院
Industrial Technology
Research Institute

Exhibition & Promotion

Energy Technology Exhibition (2010)

Green Industry Exhibition (2010)

Annual R & D Accomplishment Presentation (2010)

Green Technology Promotion (2010)

Copyright 2011 ITRI工業技術研究院

2010 Taipei International Invention Show & Technomart

Themes： Smart Life | Biotech + Medicare | Green Future

Hi- Efficiency VariableSpeed Scroll Compressor

Smart Grid

Carbon Capture Storage

Self-generating electrolytic Dechlorination Shower

Copyright 2011 ITRI工業技術研究院

e –Journal & News

EPA's 3R Web

http://recycle.epa.gov.tw/Recycle/index2.aspx

Bureau of Energy/ Ministry of Economic Affairs

http://www.moeaboe.gov.tw/English/english_index.aspx?Group=4

Renewable Energy Web

http://www.re.org.tw/RE2/

EMS for Convenient Sores

- Background
  - **To reduce 10% of electricity used in each conveniet store**
  - **Focused on FamilyMart Convenient Store chain first**
- Green benefits
  - **Reduce 700 MWh electricity in 2011 (430,000 tons of carbon**
  - **A total of 1 million tons of carbon emmission can be reduced when the EMS is applied to all of its 2,500 stores**
  - **Expanding the practice and experience to FamilyMart's stores in China**

Copyright 2011 ITRI工業技術研究院

Waste to Fuel: RDF-5

- Complex composition
- Non-uniform shape and size
- High water contain (~50%)
- Low heating value (~1,800 kcal/kg)
- Easy to corrupt and produce ordor

MSW

RDF

Incineration	1,500-2,500 kcal/kg	40-60%	15%@200-300°C	20-30 kg/cm^2
Process	LHV	Moisture	Heat rate	Steam pressure
RDF power gen.	3,000-4,000 kcal/kg	5-10%	35%@540°C	100 kg/cm^2

- Homogeneous composition
- Uniform shape and size
- Low water contain (<10%)
- High heating value (~4,000 kcal/kg)
- Easy to store and transport

Copyright 2011 ITRI工業技術研究院

1st RDF-5 Demo Plant for MSW in Chinese Taipei

Treatment capacity: 1,000 kg/hr MSW

經濟部能源局

hualien
花蓮縣政府

Opening ceremony, Jun 24, 2004

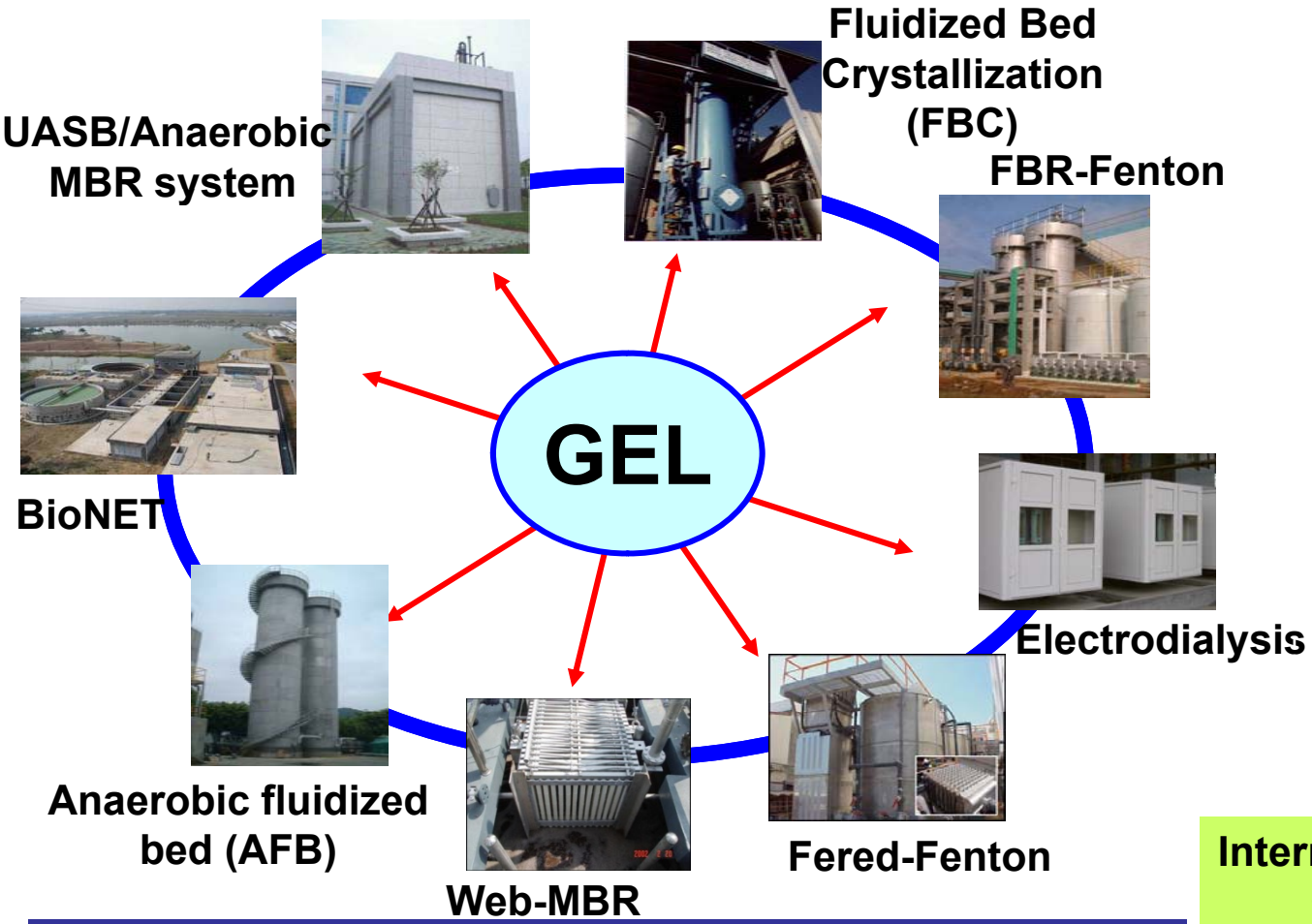
Technology Transferred

- Transferred the technology to 7 companies and induced 38 millions USD capital investment in Chinese Taipei
- Licensed two companies for the commercialization in China and Southeast Asia

- Potential for RDF utilization in Chinese Taipei
  - 15% of MSW converted into the RDF can substitute for 350,000 tonnes of coal approximately.
  - The total electricity generation can reach about 145 MW with a carbon dioxide reduction of 980 thousand tonnes.

Copyright 2011 ITRI工業技術研究院

Full-scale Applications of Wastewater Technologies



Total solution!

- patents approved: 110
- patents pending: ~30
- technology transfer/ patent licensing: >50
- application: >20 industries >80 factories

Formed strategic alliance with Trident Innovations SDN BHD and Chinese Taipei engineering companies. ITRI provide basic technologies, Chinese Taipei companies provide engineering know-how, and Trident provides marketing and services.

International business partners
- Veolia Water
- GE Water
- CTCI
- Trident
- Glowtec, ….

Copyright 2011 ITRI工業技術研究院

- Overview of ITRI's Roles in Helping Green Technology Development
- Chinese Taipei Government's Programs on Expanding Green Technology Applications
- ITRI's Efforts on Expanding Green Technology Applications
- **Conclusions**

Copyright 2011 ITRI工業技術研究院

Conclusions

Government plays a heavy role in helping the establishment, growth and expanding of green technology development particularly for resource limited SME. The approaches can be taken including:

- Promote green technologies and its benefits through symposium, exhibition and trade show etc.
- Form demonstration programs and dedicated industry parks
- Establish standards, certificates, labeling etc to differentiate and add value to green technology derived products
- Provide subsidy and incentives etc.
- Provide information on regulations, restriction, and related information such as data bank etc.
- Enhance collaboration through forming association and alliance etc.
- Eliminate legal restriction and even assisting on exporting green technologies

Copyright 2011 ITRI工業技術研究院

Thank you for your attention!

Copyright 2011 ITRI工業技術研究院

Ministry of Cooperatives and SME
Republic of Indonesia

International Workshop and Training on The Role of Business Incubators in Developing Green Technology-Based SMEs

Yogyakarta, 27-29 September 2011

Asia-Pacific Economic Cooperation

ORSOLINDO
INNOVATION WASTE TREATMENT

ORGANIK SOLO INDONESIA

Green compost and Plastic Recycle Company

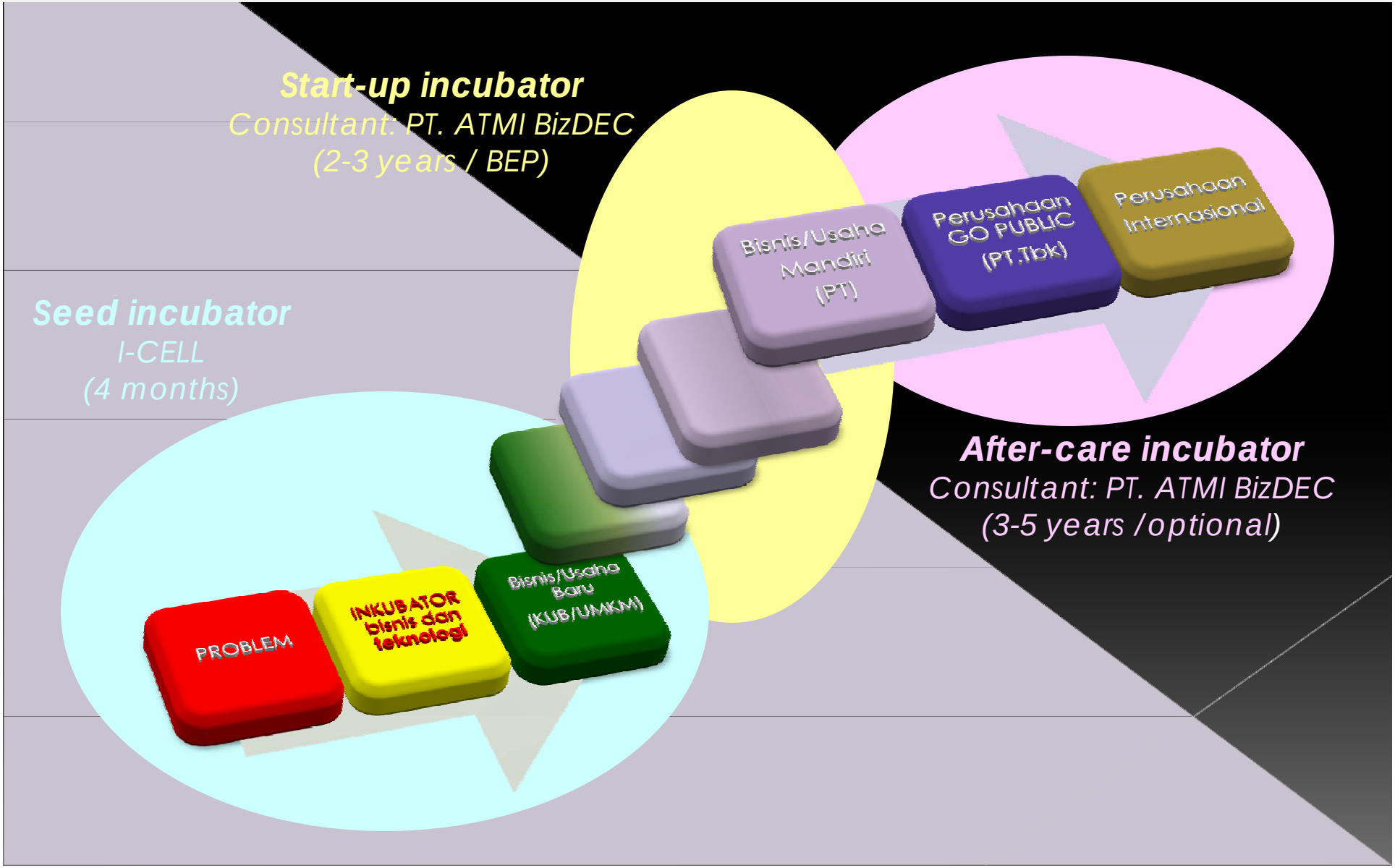
By

Ixa Fibriastuti, STP

(Alumni of I-CELL Incubator, Manager of ORSOLINDO)

I-CELL

Business and Technology Incubator



ORSOLINDO *Organik Solo Indonesia*

I-CELL

2009

Coal Waste Treatment Project	(High Investment)
Jatropha Bio-Fuel Project	PT. AKE
Cottonii Seaweed Chips Project	PT. AKA

2010

City Waste Project	KUB. ORSOLINDO
Cocomesh Project	PT. Maucoco Indonesia
Gracilaria Seaweed Project	PT. Samudra Agar Indonesia

2011

Bioethanol Project	in the process of production to industrial-scale experiment
Seaweed Waste Project	(PT/KUB) **Solo Mixing Feed Mill**
Cassava Powder Project	(PT/KUB) **PAPKI Incasindo**

ORSOLINDO *Organik Solo Indonesia*

VISION and MISION

VISION

Empowering and increasing the welfare society through waste management and waste processing comprehensively, professionally and profitably.

MISION

- Increasing and supporting the awareness and community participation, and taking a part in waste management to decrease the waste, start from the source so that it can create a friendly environment.
- Creating food endurance and social welfare by increasing the waste added value.
- Doing innovation of research by processing waste based on environment insight.

ORSOLINDO *Organik Solo Indonesia*

PRODUCT and CUSTOMER

I. MAIN PRODUCT

1) Green Compost (Organic Fertilizer)

Customers:

- PT. Unitek Borneo, Balikpapan, KALTIM
- Div. of Cleanliness and Park, Surakarta City
- Sellers of flower and plants
- Farmers
- Housewives
- PT. Freeport, Timika, Irian jaya *(in process)*

2) Plastic Recycles (PP & PET)

Customers:

- PT. Majestic Buana - Jakarta *(exportir)*
- CV. Omega Indoplast - Surbaya *(exportir)*
- Mr. Parno - Karanganyar *(agent)*
- Mr. Marno - Surakarta *(agent)*
- Mr. Darto - Karanganyar *(agent)*

ORSOLINDO *Organik Solo Indonesia*

PRODUCT and CUSTOMER

II. SECOND PRODUCT

1) Tools and machineries of green compost maker

Customer:
- Division of Human Resource, Government of Surakarta

2) Threecycles of waste carrier (fiber-glass)

Customer:
- Division of Cleanliness and Park, Government of Surakarta

3) Threecycles of plantation employees

Customer:
- Mrs. Megawati Sukarno Putri (The fifth Indonesian President)

ORSOLINDO *Organik Solo Indonesia*

PRODUCT AND CUSTOMER

II. SECOND PRODUCT

4) Training and Consultation (Promotion)

Training of making organic waste crusher machine

Visit of Officers PI-UMKM BPPT Jakarta

Promotion in educative environment

Training of cutting organic waste

Visit of BNI 46 Officers (Semarang Branch)

Socialization in Human Resource Division , Ska.

Training of making granules organic fertilizers

Visit of Farming Division of Surakarta Government

Giving consultation to the Customers

ORSOLINDO *Organik Solo Indonesia*

Nett Profit of Product

I. MAIN PRODUCT

1) Green Compost (Organic Fertilizer)

➢ Organic Gold Fertilizer	Rp. 200.000,-/ Ton	($ 23.32 / Ton)
➢ Organic Granules Premium Fertilizer	Rp. 600.000,-/ Ton	($ 69.96 / Ton)
➢ Organic Granules Phosphat Fertilizer	Rp. 250.000,-/ Ton	($ 29.15 / Ton)
➢ Organic Granules Nitrogen Fertilizer	Rp. 300.000,-/ Ton	($ 35.00 / Ton)

2) Plastic Recycles

➢ PP (*Polypropylene*)	Rp. 3.100.000,- / Ton	($ 361.47 / Ton)
➢ PET (PolyEthylene Terephthalate)	Rp. 1.000.000,- / Ton	($ 116.67 / Ton)

II. SECOND PRODUCT

1) Tools and Machineries of green compost

➢ Waste thrush 3in1 ORS-30	Rp. 15.000,- / Unit	($ 1.75 / Unit)
➢ Waste filter ORP-10	Rp. 125.000,- / Unit	($ 14.58 / Unit)
➢ Composting Machine ORC-100	Rp. 750.000,- / Unit	($ 87.45 / Unit)
➢ Granuling Machine ORG-125	Rp. 5.100.000,- / Unit	($ 594.68 / Unit)
➢ Crusher Waste Machine ORW-500	Rp. 5.250.000,- / Unit	($ 612.17 / Unit)
2) Threecycles of waste carrier (fiber-glass)	Rp. 1.000.000,- / Unit	($ 116.67 / Unit)
3) Threecycles of plantation employees	Rp. 1.500.000,- / Unit	($ 175.01 / Unit)

$ 1 = Rp. 8.576,-

ORSOLINDO *Organik Solo Indonesia*

THE PRIMACIES

- Green Compost:
  1. The price of materials are cheap
  2. The main materials are easy to get
  3. The profit is big enough
  4. Simple Technology
  5. Have adequate positive and sociologist
- Plastic Recycle:
  1. Simple Technology
  2. Open demand
  3. Helping to get healthy and clean environment
  4. Need little employees
  5. Have a wide net-working

THE DRAWBACKS

- Green Compost:
  1. Need a large working area
  2. There are many competitors
  3. It need strong marketing technique to compete with chemistry fertilizers
- Plastic Recycle:
  1. Need a large working area
  2. Limited main materials
  3. Dirty working areas

The Challenges as a new SME

GOAL

5. Have self confidence to succeed
4. Have a good finance management
3. To grow-up the second product innovatively
2. Marketing must be strong and able to make a net-working
1. Human Resource should be proportional, competent and tough

The next Strategic

1. Build a new firm : PT. ORSOLINDO TEKNIK SEJAHTERA
2. Create net-working of main material
3. Increase customer's trust
4. Look for addition financial capital
5. Broadened market

ORSOLINDO *Organik Solo Indonesia*

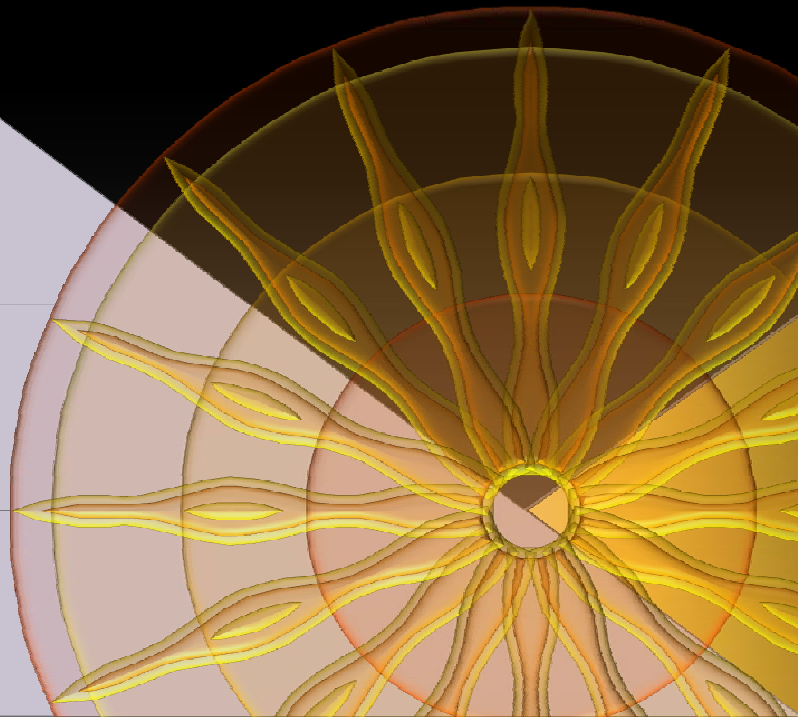
Contact:

- **AM. Bambang Rusiantono**
  Director - HP . 081548550000
  E-mail: brusiantono@yahoo.com
- **Ixa Fibriastuti, STP**
  Marketing Manager - HP. 081329504947
  E-mail: orsolindo18@yahoo.com

Head Office :
Jl. Bone Barat Utama I/10
Banyuanyar, Surakarta – 57137
Phone: 0271 - 7089175

Branch Office:
Jl. Bromo No. 5/23 Kp. Ceplukan
RT 01/RW18 Wonorejo, Karanganyar
Phone: 0271 - 8500101

http://www.orsolindorganik.com



Zero Waste Vetiver Production

Incubating Green Business SME's

September 29, 2011
Yogyakarta, Indonesia

by **Ahmad Nur Fathorudin**
"Vetiver Specialist"
Pulus Wangi vetiver oil

Agenda

- Introduction
- Vetiver overview
- Pulus Wangi Vetiver
- Global Warming Issue
- Zero Waste Vetiver Program
- Project Opportunities
- Question

Introduction

Name	:	Vetiver
Kingdom	:	Plantae
Family	:	Poaceae
Genus	:	Chrysopogon
Species	:	C. Zizanoides
Native	:	India
Distribution	:	India, Java, Haiti and Reunion
Uses	:	Perfumery, Agriculture and bioengineering

Pulus Wangi Nusantara

Vision :

Market leading company and source of vetiver reference in the world. Develop Eco-friendly product, maintaining and developing the concept of partnership and cooperation across the business chain to deliver value to stakeholders.

Missions :

1. Manufacturer linkage product and one stop vetiver center for providing best services to the customers.

2. Producing high quality vetiver to sustain the historically well known Javavetiver in the world.

3. Developing Green Productions and Green Marketing Program trough zero waste vetiver concept.

4. Creating partnership pattern with all stakeholders.

Motto :

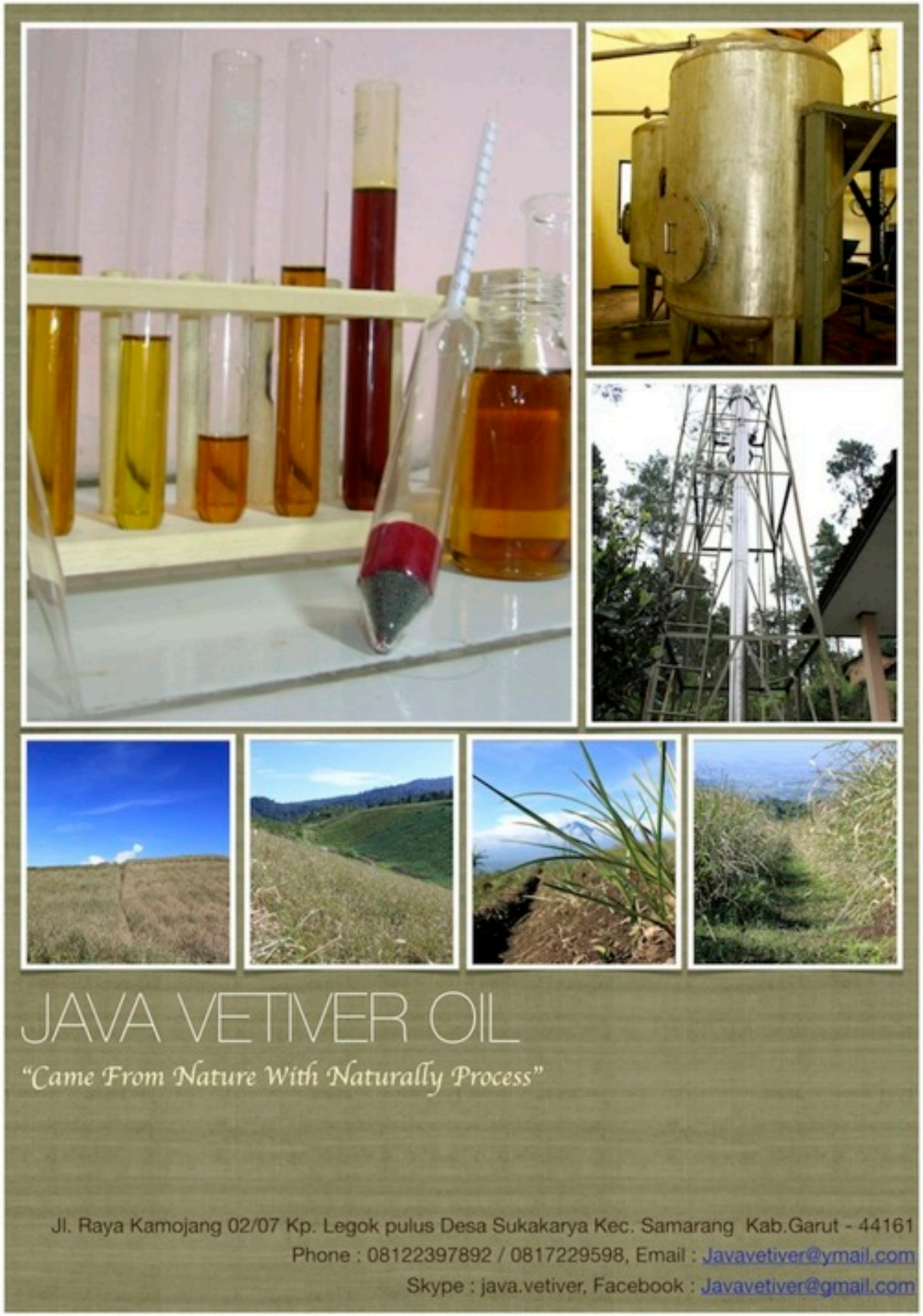
" Came From Nature with Naturally Process "

Business

Vetiver Oil
1. Vetiver Oil Premium Quality 2. Vetiver Oil Regular Quality 3. Vetiver Oil Dark Quality 4. Vetiver Oil Organic **(Develop)**

Total Production Vetiver Oil

800 kg / month



Business

Vetiver Craft	
Fashion	Bag, Place mat, Laptop case, Cloth etc.
Home Decoration	Case lamp, Curtain, Table Set, Painting etc.

Business

Vetiver Seed / Plant

1. Vetiver seed for Oil Purpose
2. Vetiver Seed for Craft Purpose
3. Vetiver Seed for Reclamation land
4. Vetiver Organic Plant

JAVA VETIVER LAND

Our Java Vetiver Land supported by a large Vetiver farm lands area we build cooperative production with groups of vetiver farmers to ensure supply availability with partnership together system.

We only use quality seeds and has a certificate from the ministry of agriculture.

We also use the best seed/vetiver plants that we are developed in cooperation with research centers and Leading Indonesia universities (Bogor Agricultural University,Indonesia University of Education, Padjadjaran University, Bandung Institute of Technology and Gadjah Mada University etc.) to produce the best quality of Vetiver oil.

Business

Vetiver Waste

1. Vase
2. Organic Fertilizer
3. Photo Frame
4. Particle Board
5. Art Paper
6. etc.

All About Vetiver"

We produce all the things about the Vetiver Grass with concept "Zero Waste vetiver program" utilizing all potentials from vetiver live plants until waste of vetiver grass, with the concept we tried to produce Unique, Best Quality and Green products to support and promote environmental friendly.

Contact :

Phone : +62817229598, Email : Vetiver.House@gmail.com

New Concept product

Vetiver soap

Vetiver Coffee

Aromatherapy
Vetiver Chocolate

Vetiver Candle
Aromatherapy

Aromatherapy Oil

Main Idea

1. Garut Vetiver Industry Start from **1918**

Employ **10.000** People

2. Garut Vetiver Industry Produce Vetiver Roots 7,450 ton / year

Area	Ha	Ton
Samarang	800	2,500
Leles	750	2,250
Pasirwangi	440	1,350
Cilawu	210	720
Bayongbong	200	630
Total	**2,400**	**7,450**

7,450 ton vetiver = 5,960 ton waste vetiver/year

From 1981- until 2011 => 93 Years

Condition

Thrown away, piled and then burned.

5,960 ton (vetiver waste) X 93 (years) = 554,280 ton

<=>

Increase Global warming Effects

Main Idea

Garut Vetiver Industry Fuel Consumption 350 liter / Batch

Total Production Vetiver Oil = 60 ton / year

$$\frac{350 \text{ liter X } 60{,}000 \text{ kg.}}{4 \text{ kg.}} = 5{,}250{,}000 \text{ liter/year}$$

5,250,000 (liter) X 93 (years) = 488,250,000 liter

<=>

Increase Global warming Effects

Main Idea

554,280 ton

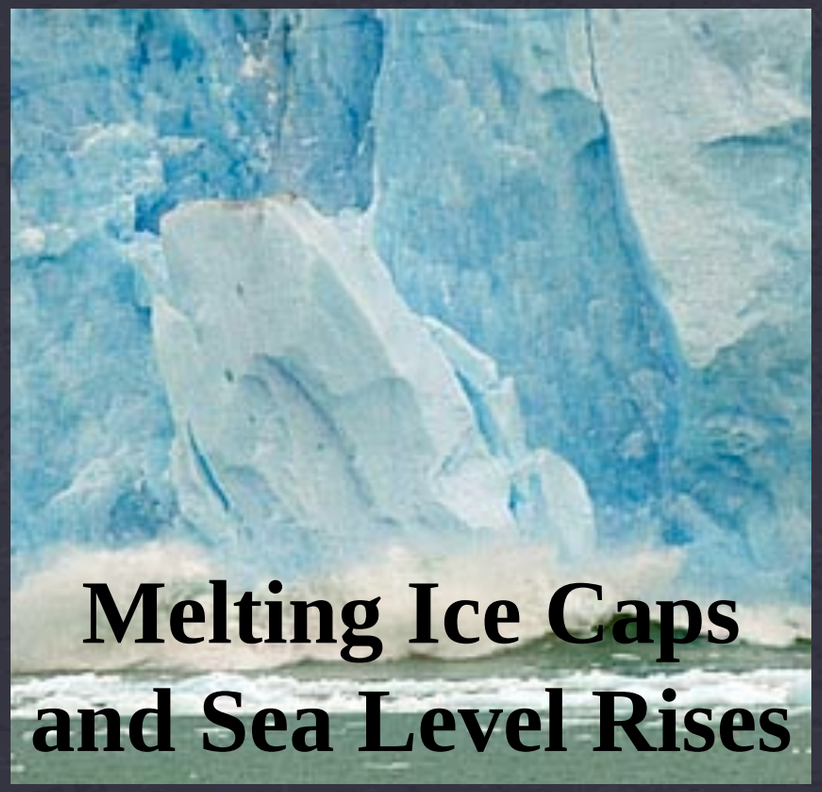
Total amount waste vetiver

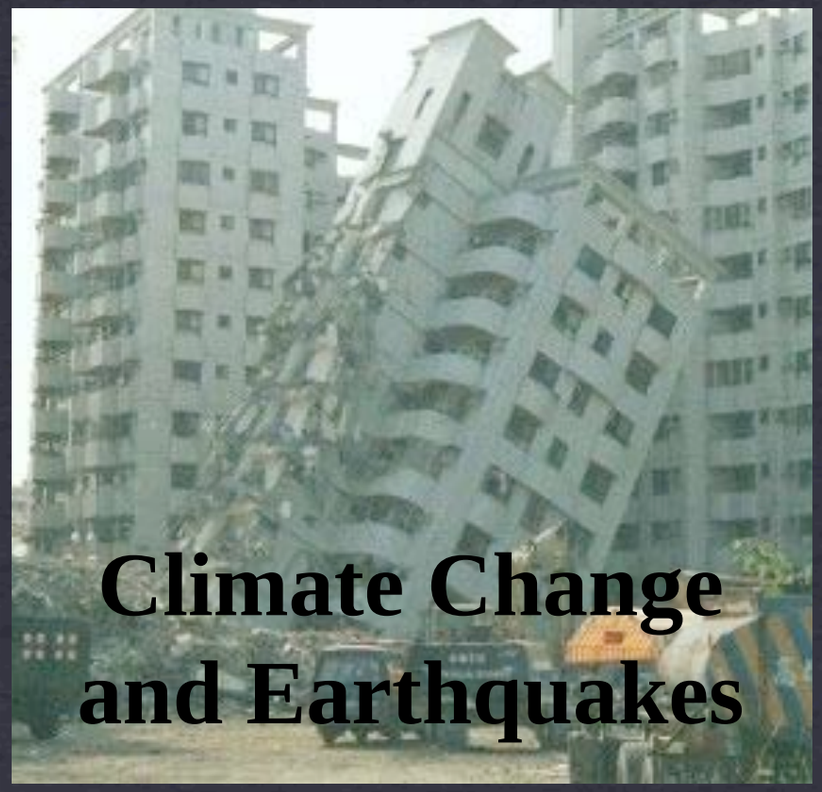
BURNED

488,250,000 liter

Total amount Fuel Consumption

BURNED





GLOBAL WARMING IMPACT

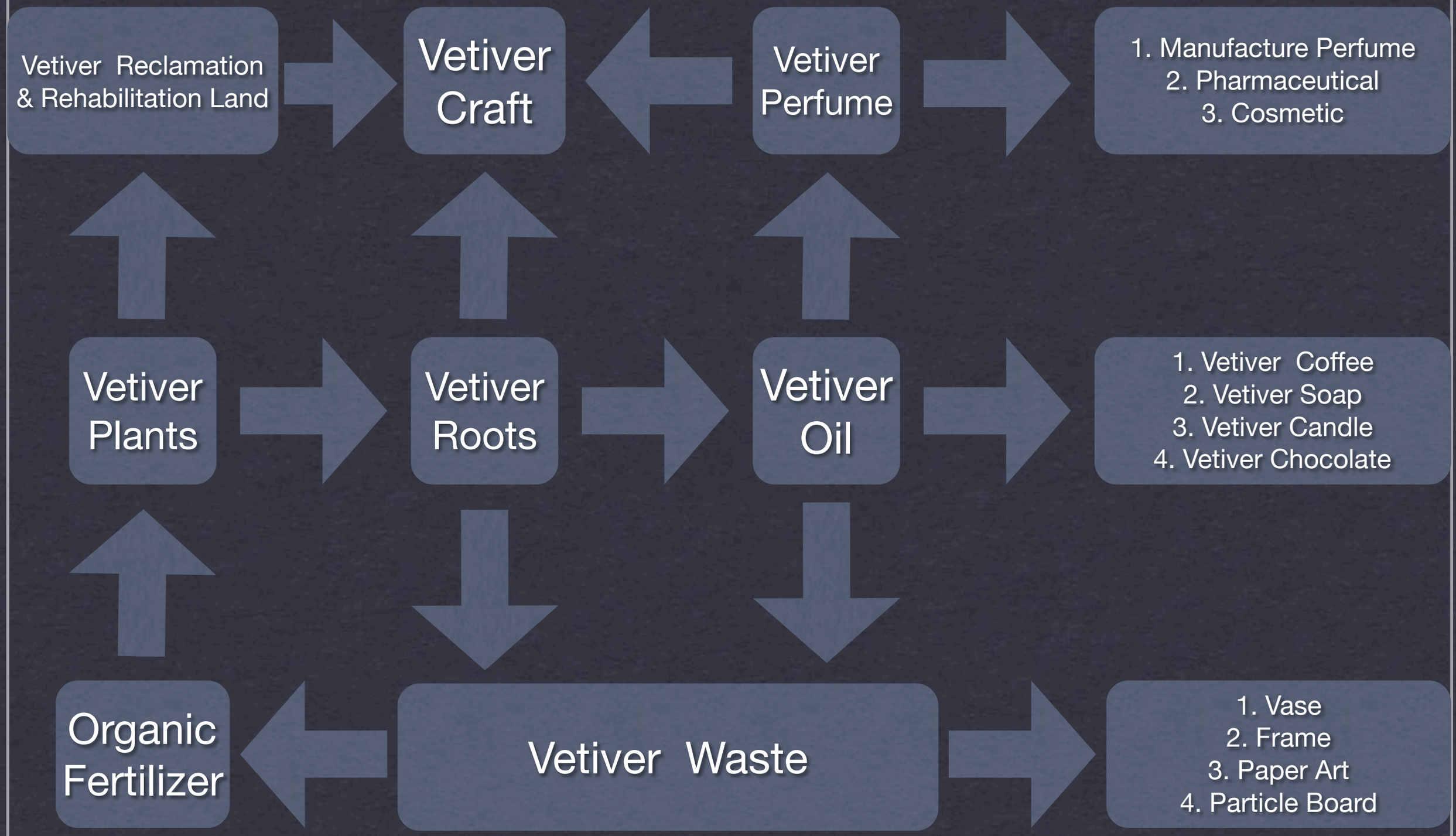
Zero Waste Vetiver Production

Utilize all of the vetiver , Green Production

&

Zero waste

ZERO WASTE VETIVER PRODUCTION

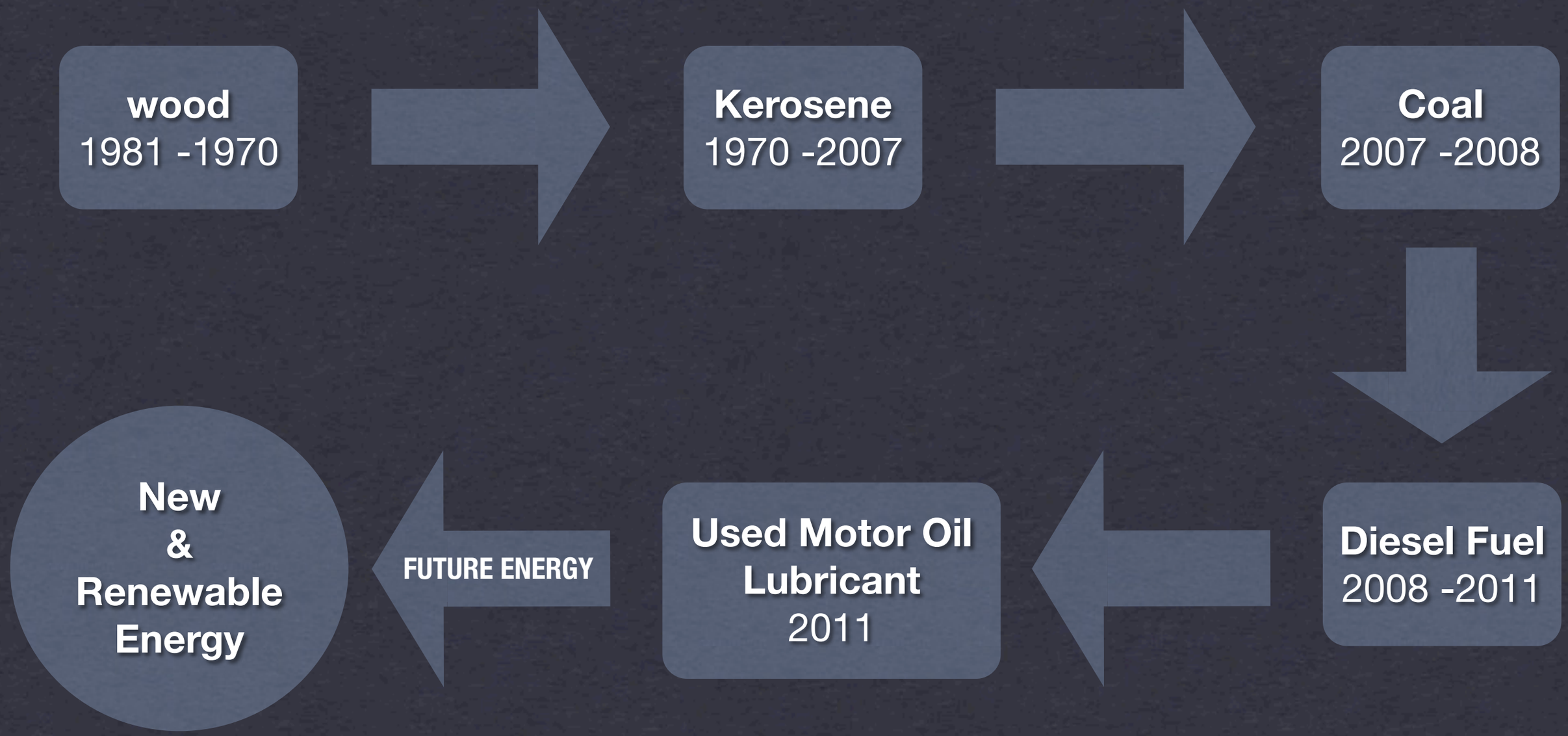


ALL ABOUT VETIVER & ZERO WASTE

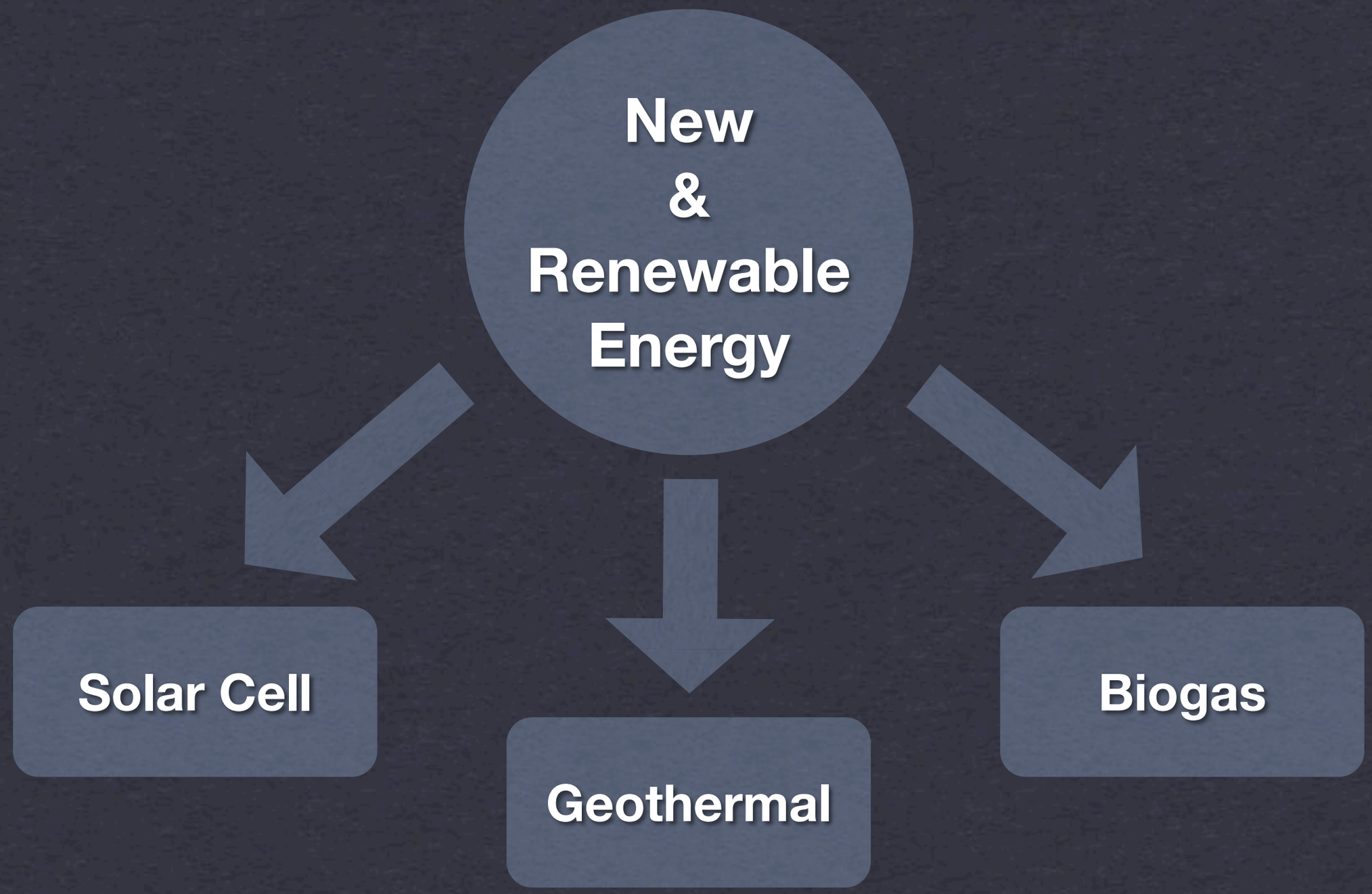
CURRENT CONDITION

CURRENT CONDITION

Revolution and Development of Fuel Vetiver Production



VETIVER GREEN PRODUCTION



VETIVER GREEN PRODUCTION

FUTURE ENERGY

BENEFICIARY

- **COMPANY** => UNIQUE COMPETITIVE ADVANTAGES, EXPANSION MARKET, REVENUE.
- **FARMERS** => REDUCE OPERATIONAL COST CAUSE USING CHEAP ORGANIC FERTILIZER.
- **SOCIETY** => ADDITIONAL INCOME, PROVIDE JOB OPPORTUNITY, HEALTHY LIVE.
- **GOVERNMENT** => ECONOMIC DEVELOPMENT IN THE REGION AND INCREASE COMPETITIVENESS OF LOCAL PRODUCT, AGAINST POVERTY & REDUCE UNEMPLOYMENT.
- **ENVIRONMENT** => HEALTHY ENVIRONMENT & GREEN.
- **LOCAL SCHOOL & UNIVERSITIES** => FUNDING TO DO COLLABORATIVE RESEARCH.

CHALLENGES & BARRIERS

- LIMITATION ACCESS TO USE TECHNOLOGY.
- LIMITATION TO DOING RESEARCH & DEVELOPMENT
- LIMITATION ACCESS TO CAPITAL RESOURCES.
- COLLABORATE WITH INCUBATOR'S TO DEVELOP NEW BUSINESS & PRODUCT.
- PEOPLE AWARENESS ON HEALTHY LIVE AND NOT DAMAGE THE ENVIRONMENT.

Partnership Program

University

1. Bogor Agricultural University

2. Indonesia University of Education

3. Bandung Institute Technology

3. Padjadjaran University

4. Garut University

5. SMK Farmasi Bhakti Adi Husodo GARUT (Vocational School)

INDONESIA GOVERNMENT

1. Ministry of Industry
2. Ministry of Agriculture
3. Ministry of Trade
4. Ministry of SME's
5. BPPT
6. BALITTRO

NGO

1. PUPUK (Perkumpulan Untuk Peningkatan Usaha Kecil) *The Association for Advancement of Small Business.*

2. Swiss Contact

3. SCC (Samarang Creative Community)

4. Centre bamboo industry Selawi - Garut

5. CSR Program - Chevron Geothermal Indonesia, Ltd. Darajat - Garut West Java

6. CSR Program - Pertamina

PROJECT OPPORTUNITIES

- **COLLABORATE RESEARCH & DEVELOP PRODUCT FROM VETIVER.**
- **COOPERATIVE PRODUCTS MARKET DEVELOPMENT.**
- **AWARENESS HEALTHY ENVIRONMENTS LIVING PROGRAM.**
- **COMMUNITY ECONOMIC DEVELOPMENT PROGRAM.**
- **DEVELOPMENT ALTERNATIVE ENERGY.**

Small Steps BIG Change

THANK YOU

CONTACT :

AHMAD NUR FATHORUDIN

MOBILE PHONE	:	+62 817 229598
WEBSITE	:	WWW.JAVAVETIVER.COM
EMAIL	:	JAVAVETIVER@YMAIL.COM VETIVER.HOUSE@GMAIL.COM
FACEBOOK	:	JAVAVETIVER@GMAIL.COM
SKYPE	:	JAVA.VETIVER

ADDRESS : JL. RAYA KAMOJANG 02/07 KP. LEGOK PULUS DESA SUKAKARYA KEC. SAMARANG KAB. GARUT 44161 WEST JAVA - INDONESIA