



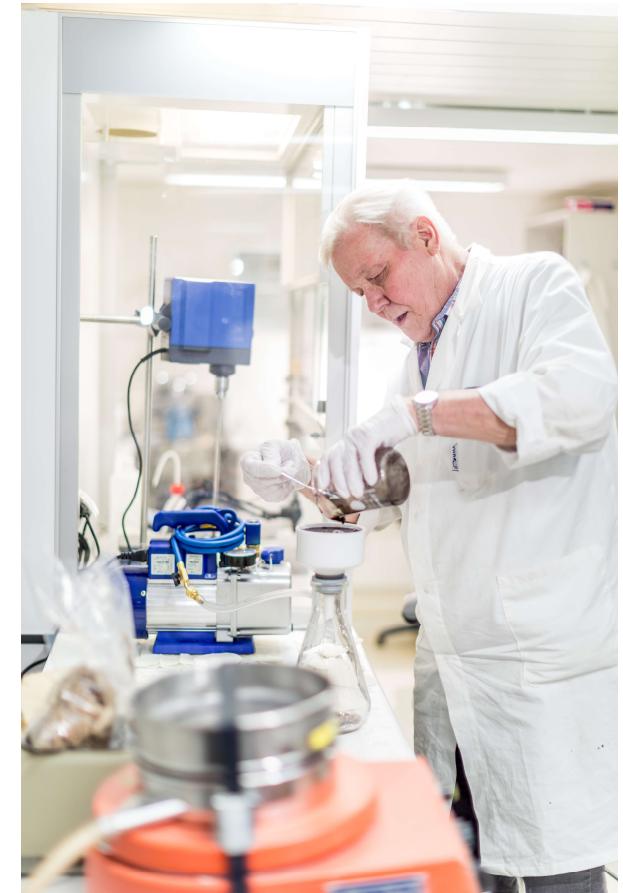
EPSE Oy  
[www.epse.fi](http://www.epse.fi)  
20.1.2021

EPSE  
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# Mitä epselöinti on ?

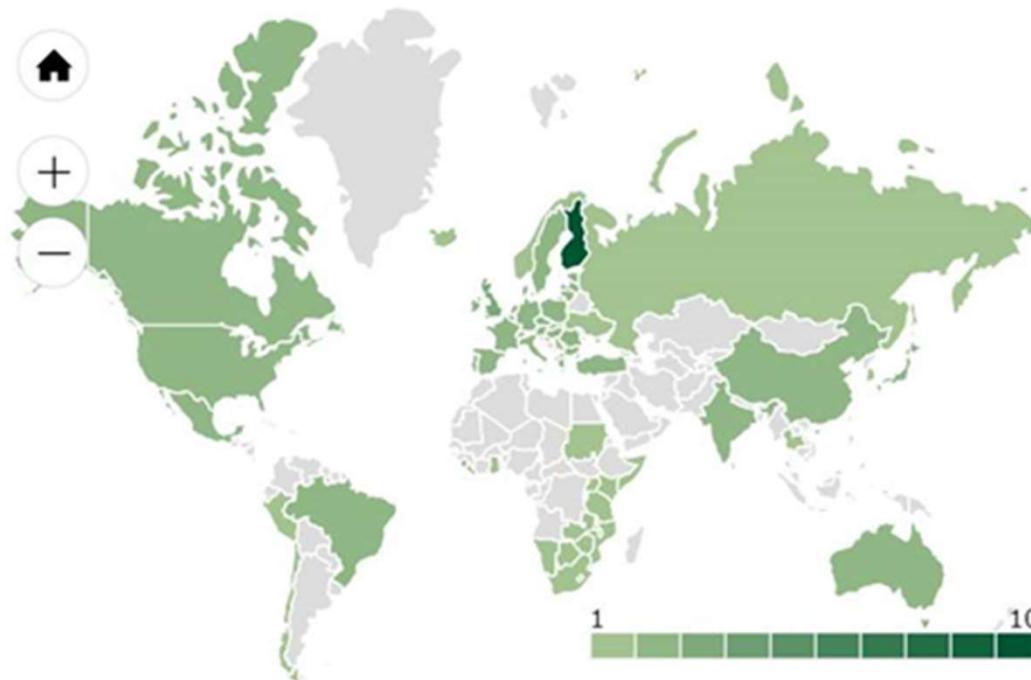
1. Kaivosten jätevesien puhdistaminen
2. Teollisuuden vaarallisten nesteiden puhdistaminen

**Liuenneiden metallinen poistaminen**



Menetelmän keksijä  
Vesa Rissanen, CTO

# EPSE Patent Coverage



# Avainmarkkinat: kaivosteollisuus

- EPSE:n kannalta oleellisten kaivosjätevesien käsittelyn kokonaismarkkinoiden arvioitu olleen yli **5 miljardia €** vuonna **2016** (Frost ja Sullivan).

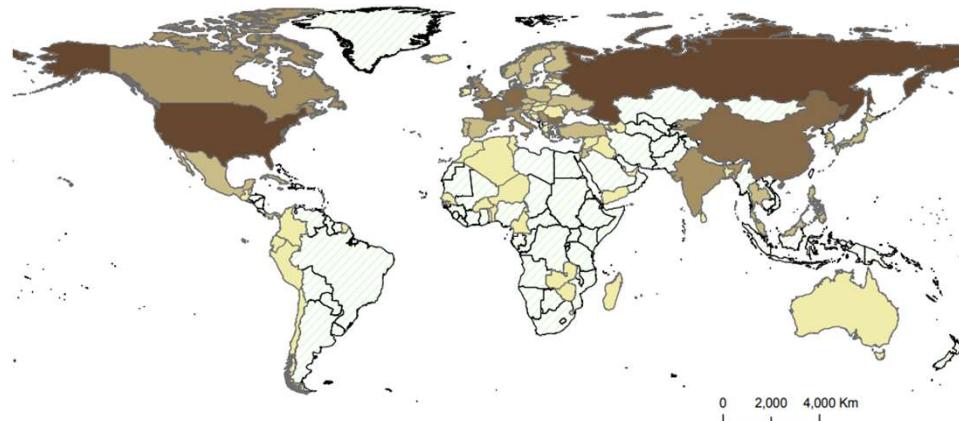


**Mineraaliraaka-aineiden tuotanto  
maailmassa 2016 (Reichl, Shatz &  
Zsak 2017)**

Eurooppa	1 481 935 544 t
Pohjois-Amerikka	2 568 568 853 t
Oseania	1 134 181 099 t
Etelä-Amerikka	1 207 621 082 t
Afrikka	933 400 198 t
Aasia	9 943 982 008 t
<b>Yhteensä</b>	<b>17 269 688 784 t</b>

# Avainmarkkinat: teollisuusjätteen käsittely

- Teollisuusjätteen käsittelyn markkinat on 33,9 miljardia \$ 2019
- 5 – 10 kertaa suurempi markkina kuin kaivosteollisuuden jätevesien käsittely



**Units: 1000 tonnes**  
\*Note that data correspond to the latest year available.

■ 0 - 1,000 ■ 1,001 - 5,000 ■ 5,001 - 10,000 ■ 10,001 - 30,000 ■ 30,001 - 141,020 ■ No data available

Data Source: UNSD  
Map Source: UNGIWG

Last Update: March 2011  
Map available at: <http://unstats.un.org/unsd/environment/qindicators>

Vaarallisen jätteen muodostuminen ([www.unstats.un.org](http://www.unstats.un.org))

<https://unstats.un.org/unsd/environment/envpdf/HWaste.pdf>



# Kiina – BF R&D ohjelma

附件 2

## 江苏—芬兰双边产业研发合作项目表

Jiangsu (China) - Finland Industrial R&D Program

### Bilateral Cooperation Form

注：双方必须用中英文共同填写此表格。

Please fill out the form in Chinese and English by both sides.

EF  
Global Ecc

WW  
FI 24

#### 1. 项目基本信息

Basic information

1.1 项目名称

燃煤烟气脱硫废水中重金属无害化处理技术的合作开发

Co-development of Harmless Treatment Techniques and Applications for Heavy

# Alun haasteita ?

- **Kumppanin löytäminen - valinta**
  - Tapaamiset
  - Kumppanin koko suhteessa omaan yritykseen
  - Omistus / henkilöstö
  - Tausta / soveltuvuus
  - yhteys paikallishallintoon / kokemus siitä
  - Voiko tehdä yksin / onnistuuko ?
- **Yhteinen tavoite ja projektisuunnitelma**
- **Rahoitus molemminpuolista / omarahoitus**
- **IPRistä sopiminen**
- **Sopimukset kumppanin kanssa**

# Project Gekof Jiangsu Province China



**Co-development  
of Harmless  
Treatment  
Techniques and  
Applications for  
Heavy Metals in  
Desulfurization  
Wastewater from  
Coal-Fired Flue  
Gas**

**The project focuses on the wastewater  
from coal-fired flue gas.**

**The solution is not in any way limited to  
coal power. On the contrary: wastewater  
containing soluble metals and sulfates is a  
very common problem widely in industrial  
and mining sector.**

**Gekof and EPSE have already  
identified 100 customers and  
estimated 4,600 customers in  
China total.**



Global Environmental Protection Service

# Nanjing Gekof Institute of Environmental Protection Technology & Equipment

## Shareholders

(registered capital NNN million Chinese RMB)

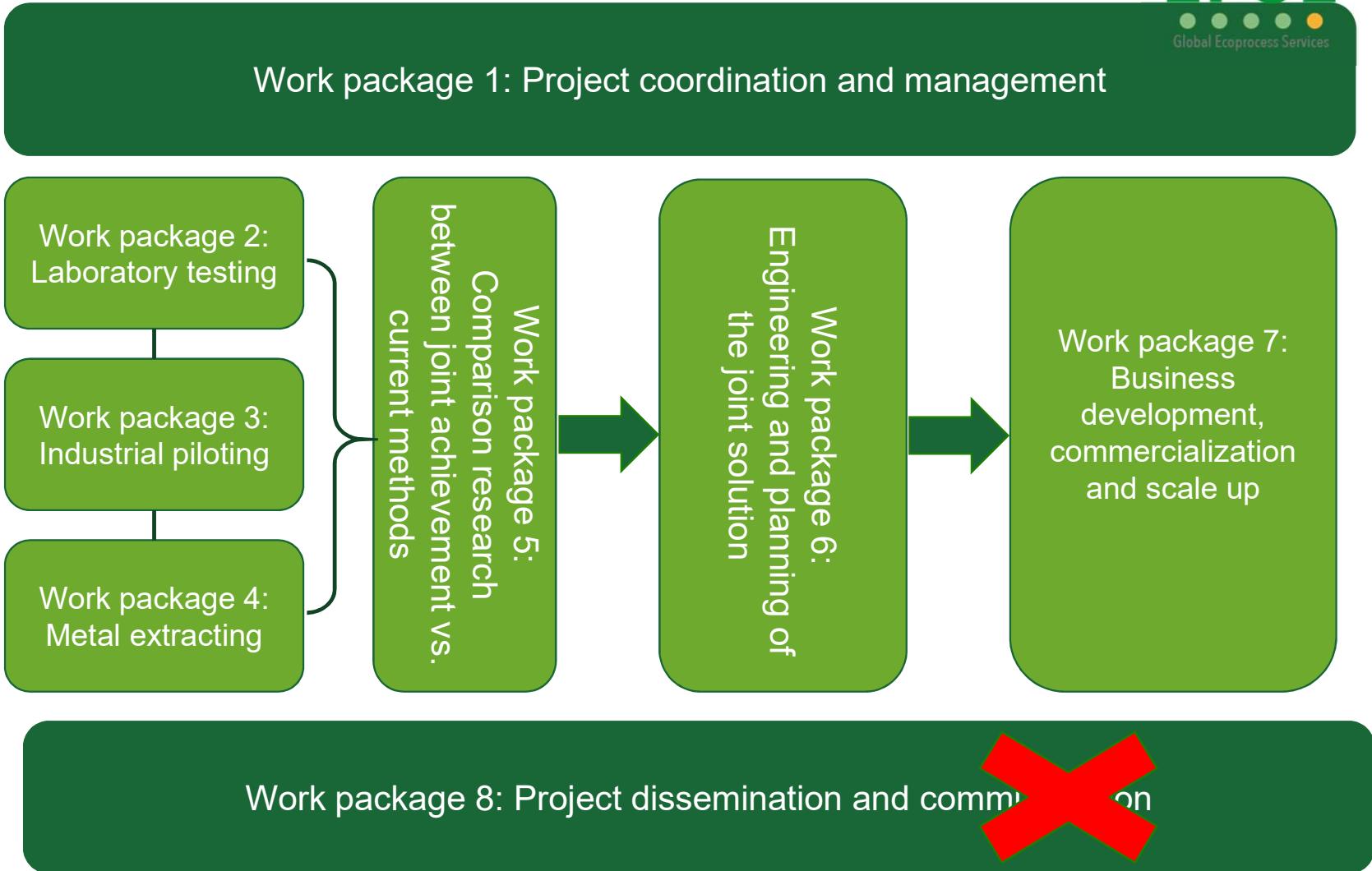
1. JD Environmental Protection Technology Ltd. (NNN million RMB, XX%)
2. NJ Economic Development Zone High-Tech Innovation & Investment Ltd. (NN0,000 RMB, XX%, governmental owned company)
3. XH (NN0,000 RMB, XX%, General Manager of Gekof, Professor of Nanjing Technology University, School of Environmental Science and Engineering)
4. CY (NN0,000 RMB, XX%, Professor of Nanjing Technology University, Deputy Director of Department of Bioengineering)
5. SY (NN0,000 RMB, XX%, PhD of Nanjing Technology University, School of Materials Science and Engineering)
6. SS (NN0,000 RMB, XX%, Professor of Nanjing Technology University, Vice Director of Graduate School)
7. ZS (NN0,000 RMB, XX%, Professor of Nanjing Technology University, General Secretary of Party of School of Materials Science and Engineering)

Gekof company is owned by XX% Professors of Nanjing University of Technology and XX % of local government development company. The University of Nanjing is not owner as itself.

## Project organization, Gekof

No.	Name	Title	Degree	Major of Study
1	徐海涛 Xu Haitao	Professor	Doctor	Environmental Science and Engineering
2	李明波 Li Mingbo	Senior Engineer	Master	Environmental Engineering
3	周长城 Zhou Changcheng	Senior Engineer	Doctor	Environmental Science and Engineering
4	沈凯 Shen Kai	Senior Engineer	Doctor	Thermal Power Engineering and Automation
5	宋静 Song Jing	Intermediate Engineer	Master	Environmental Science and Engineering
6	徐梦 Xu Meng	Assistant Engineer	Master	Environmental Engineering
7	郑叶玲 Zheng Yeling	Intermediate Engineer	Master	Chemical Engineering
8	王娇 Wang Jiao	Intermediate Engineer	Master	Environmental Engineering
9	马健 Ma Jian	Intermediate Engineer	Bachelor	Mechanical Manufacturing and Automation
10	李雅凡 Li Yafan	Assistant Engineer	Bachelor	Environmental Engineering
11	支晓欢 Zhi Xiaohuan	Student	Master	Environmental Engineering
12	梅超强 Mei Chaoqiang	Student	Master	Environmental Engineering
13	徐慕涛 Xu Mutao	Student	Master	Environmental Engineering
14	戴毅 Dai Yi	Student	Master	Environmental Engineering
15	计雯钰 Ji Wenyu	Student	Master	Environmental Engineering

# EPSE Work packages (WPs)



# BF \_ EPSE

- 1. Ennakko sparraus**
  - 1. Kumppanin merkitys ja sopimus**
- 2. Hakemuksen ennakkokäsittely**
- 3. Hakemus**
- 4. 2 x Teams käsittelyn aikana**
- 5. Päätös**
- 6. Kick Off**

- **Vinkkini:**
  - Ennakkovalmistelu
  - BF auttaa
  - Muut suomalaiset tahot, edustusto jne
  - IPR
  
  - **Muista leimaton on  
\_\_ !**



KIITOS !

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