

# REPIC

Renewable Energy &  
Energy Efficiency  
Promotion in  
International  
Cooperation



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**Interdepartmental Platform for Renewable Energy  
and Energy Efficiency Promotion in International  
Cooperation**

Vernissage Tonga Soa  
Club-44, La Chaux-de-Fonds, 3 avril 2014, Stefan Nowak



Source: Madeole, Madagascar

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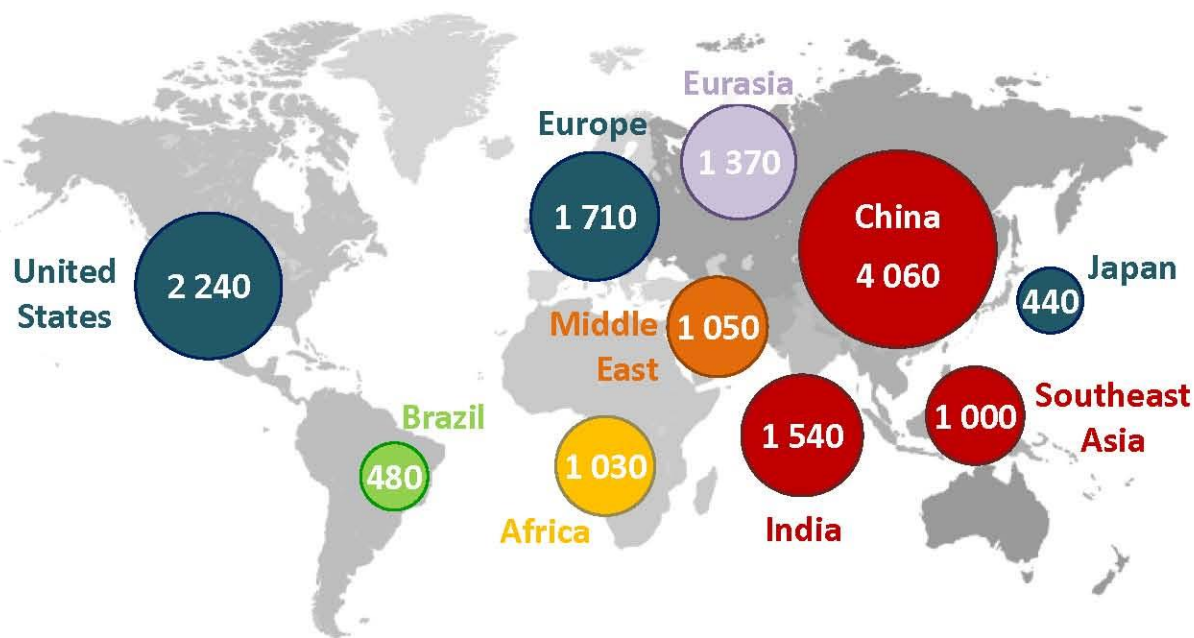
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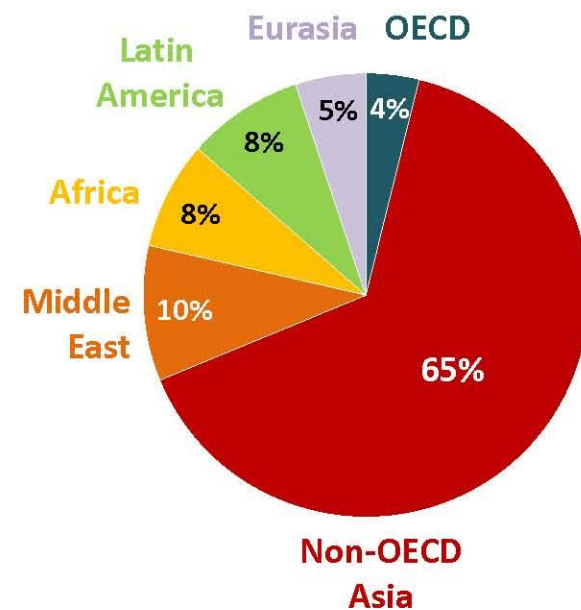
## Le grand contexte

# The engine of energy demand growth moves to South Asia

## Primary energy demand, 2035 (Mtoe)



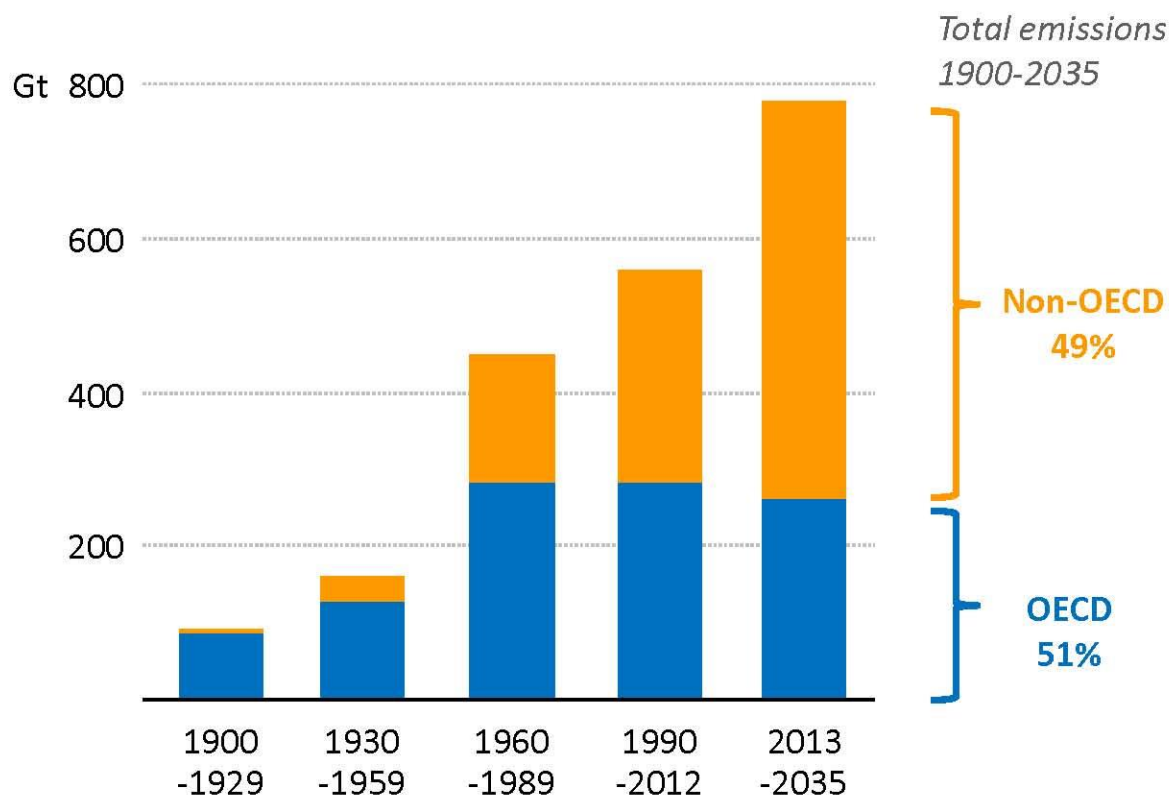
## Share of global growth 2012-2035



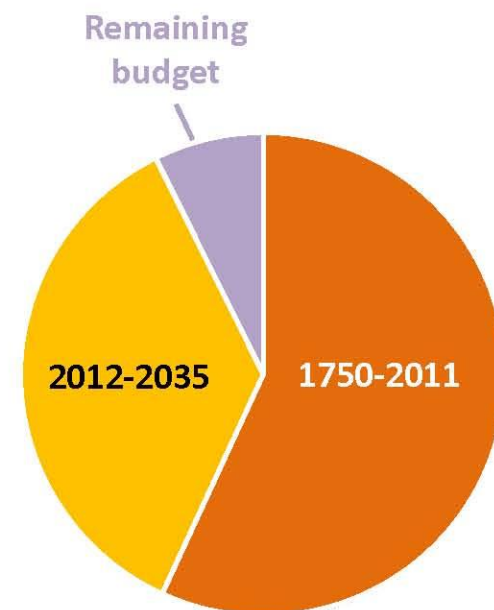
***China is the main driver of increasing energy demand in the current decade, but India takes over in the 2020s as the principal source of growth***

# Emissions off track in the run-up to the 2015 climate summit in France

## Cumulative energy-related CO<sub>2</sub> emissions



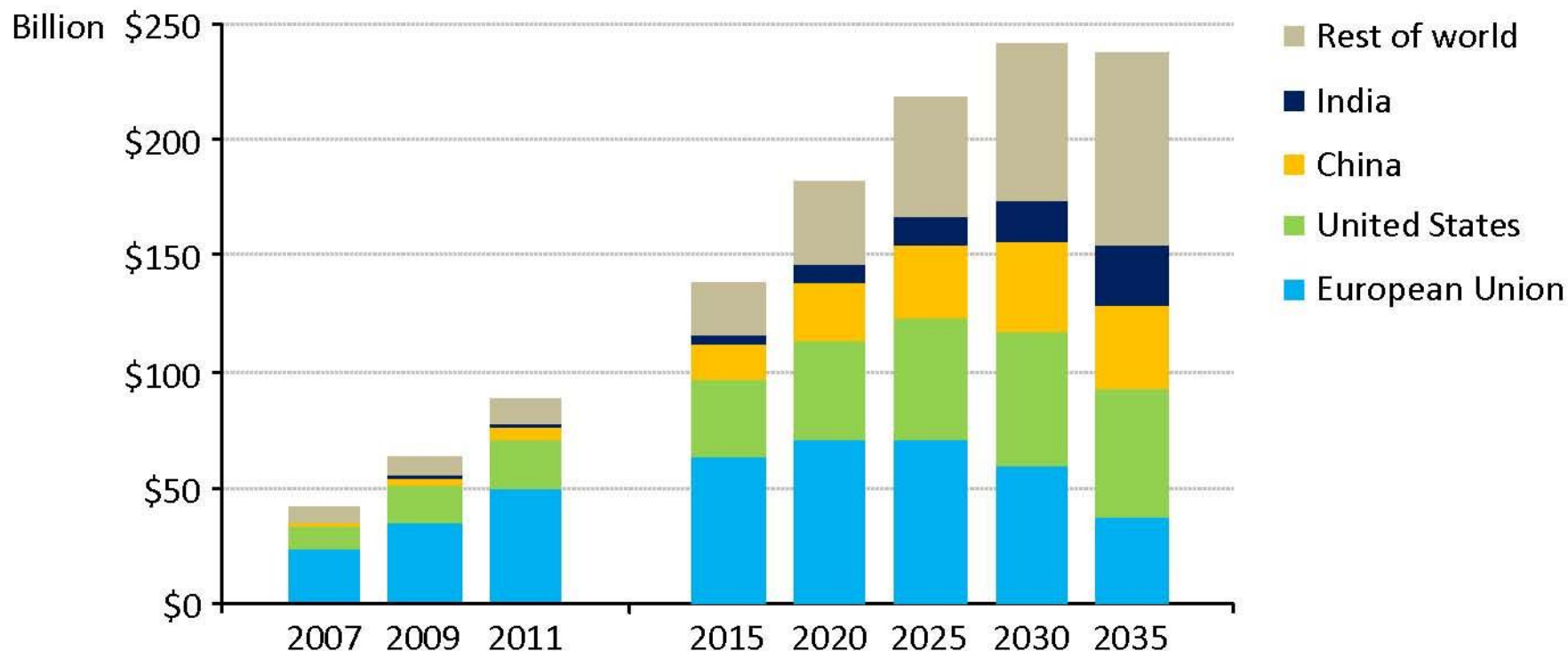
## 'Carbon budget' for 2 °C



**Non-OECD countries account for a rising share of emissions, although 2035 per capita levels are only half of OECD; the 2 °C 'carbon budget' is being spent much too quickly**

# The multiple benefits of renewables come at a cost

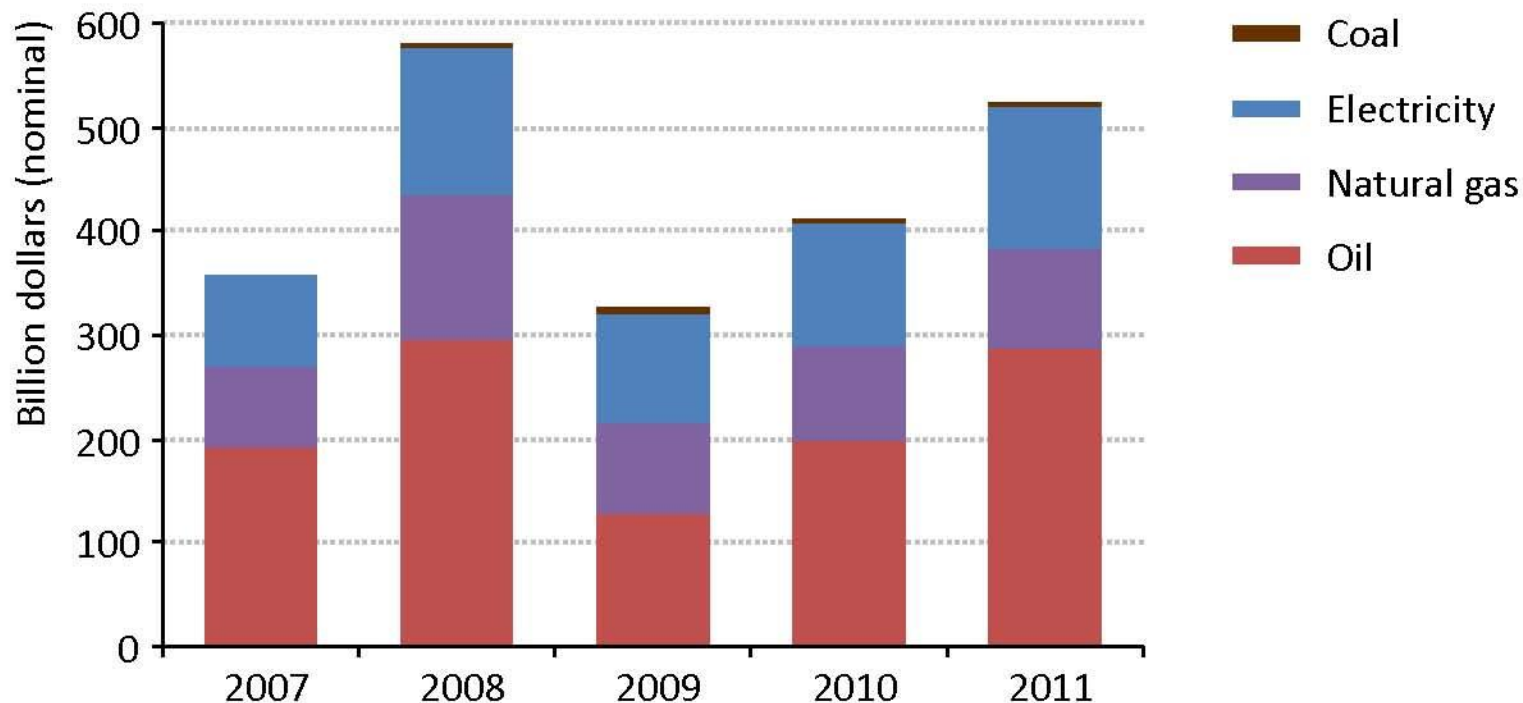
## Global renewable subsidies by region



***Renewable subsidies were \$88 billion in 2011; over half the subsidies required to 2035 has been committed to existing projects or is needed to meet 2020 targets***

# Getting rid of fossil-fuel subsidies is a triple-win solution

## Global fossil-fuel subsidies



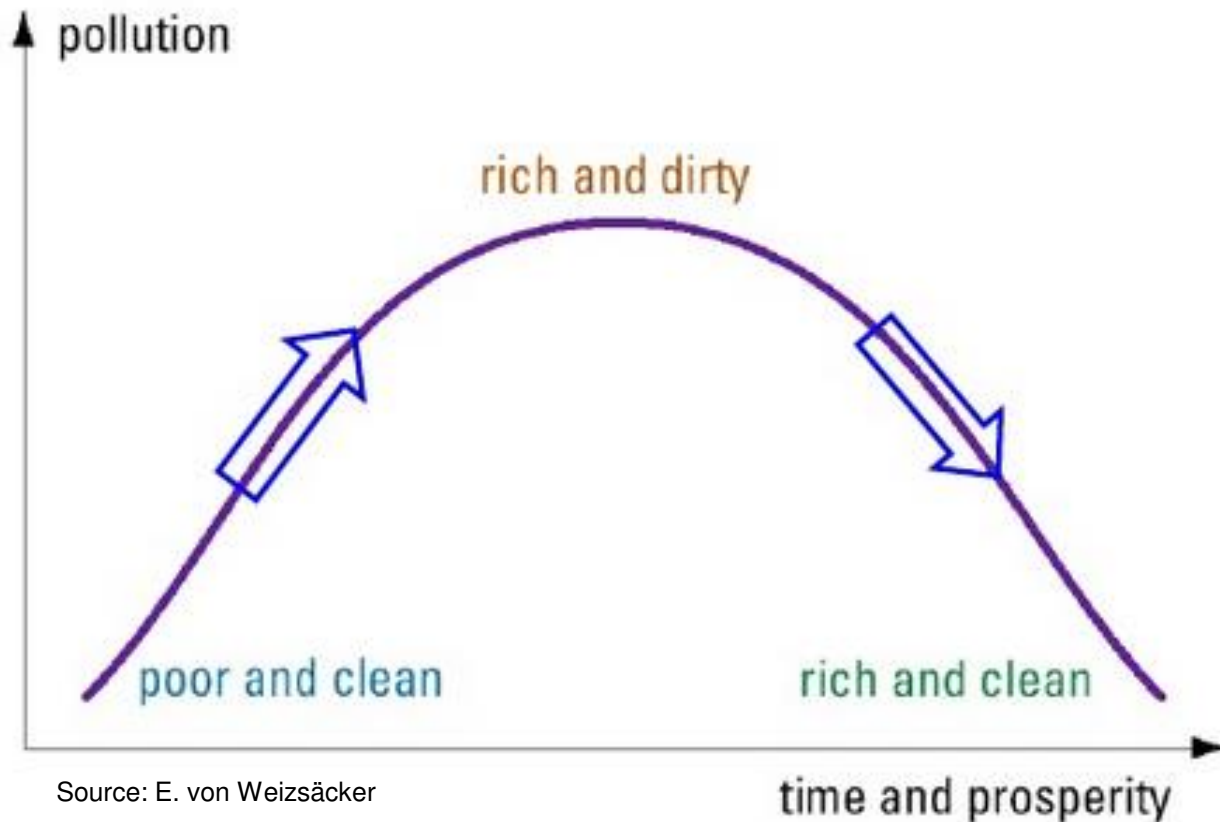
***Global fossil-fuel subsidies, which jumped to \$523 billion in 2011, are providing an incentive to emit CO<sub>2</sub> that is equivalent to \$110 per ton***

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## Objectifs durables...

**Dans des scenarios durables, l'humanité doit créer de bonnes conditions de vie et la production doit être propre (énergie, industrie etc.)**

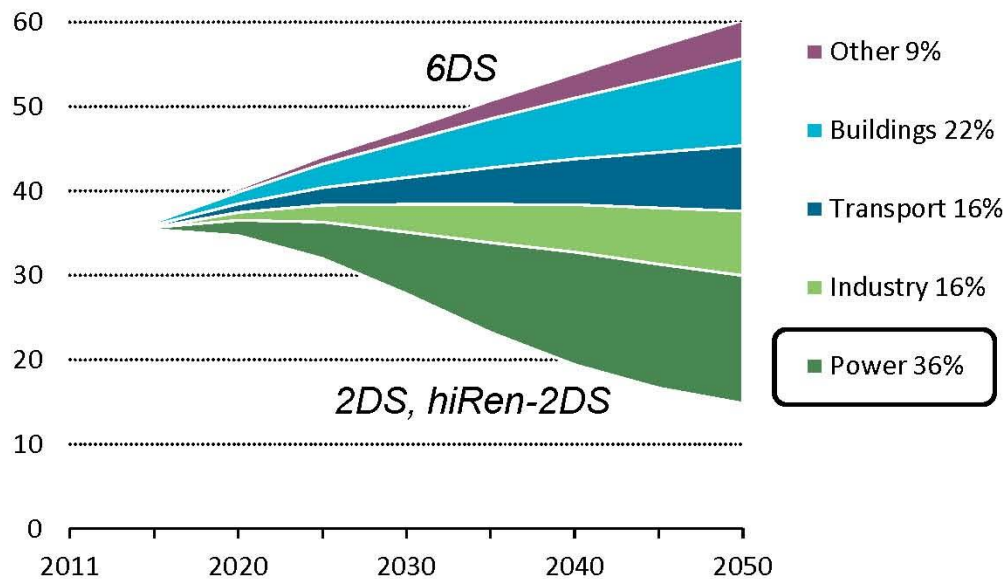


Source: E. von Weizsäcker

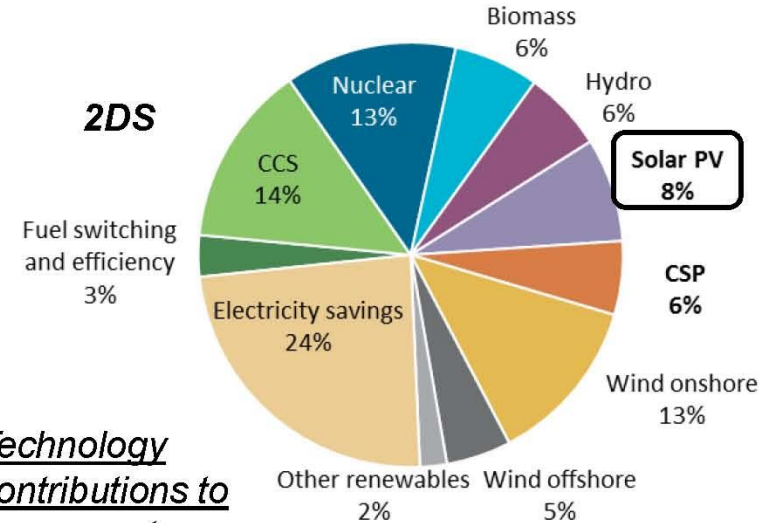
# Power sector key to decarbonise the energy system

ETP  
2014

CO<sub>2</sub> reductions by sector (relative to 6DS)

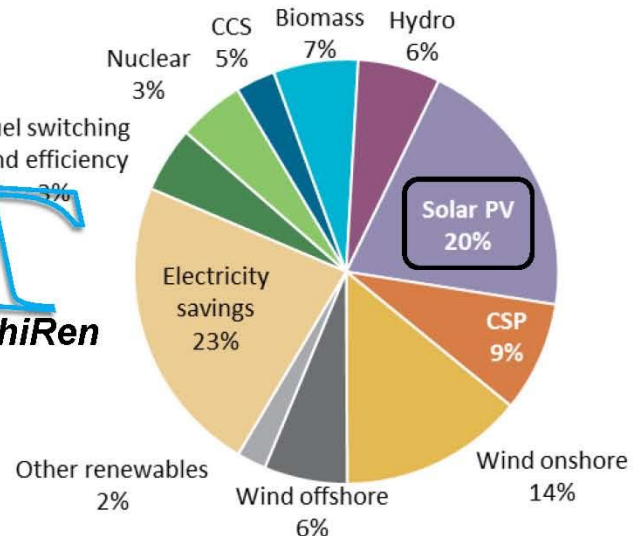


**2DS**



Technology contributions to power sector reductions

**hiRen**



**DRAFT**

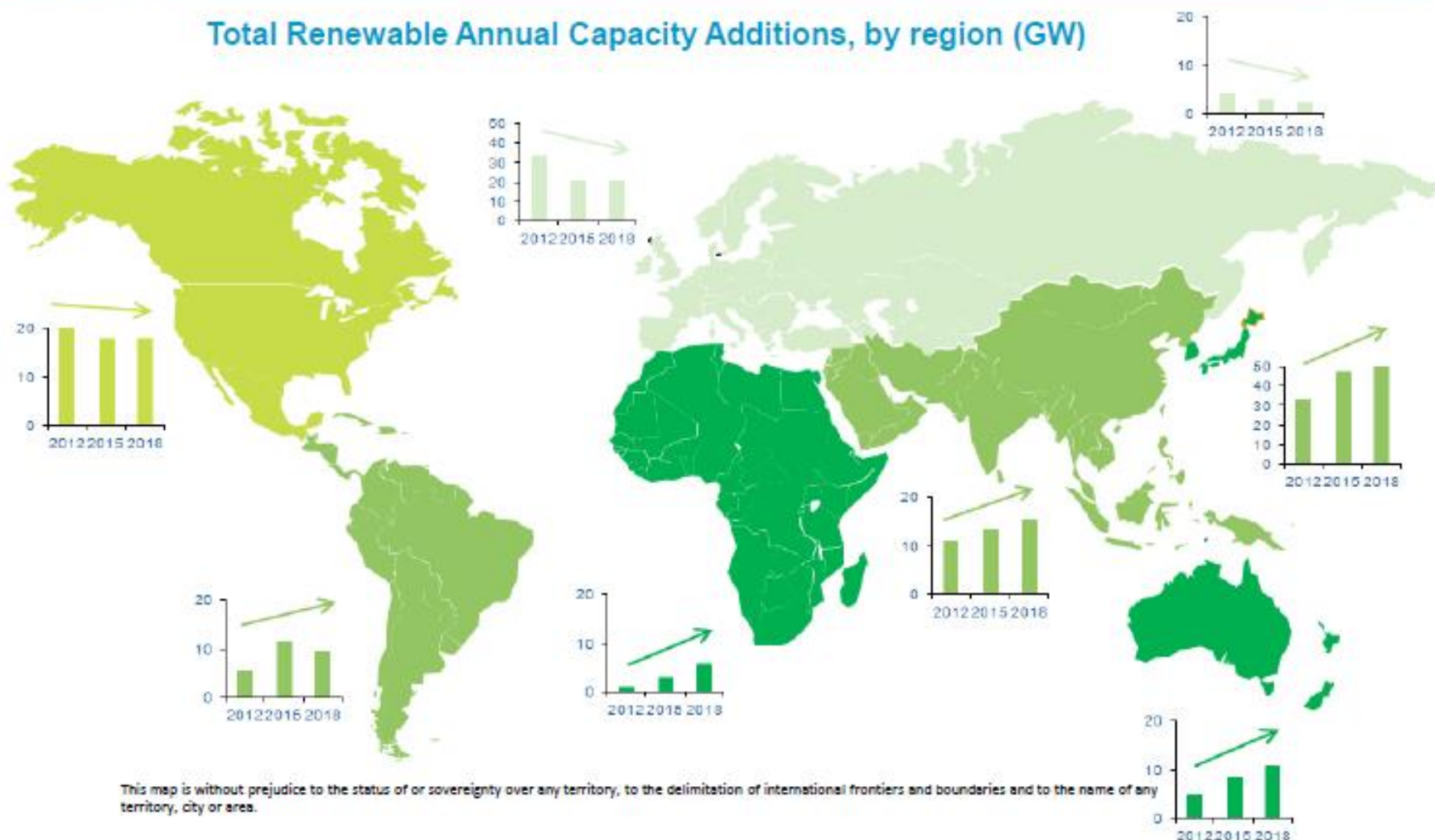
- Power sector provides for more than one third of the cumulative reductions to achieve the 2DS
- Solar PV responsible for 20% of the reductions in the power sector in the hiRen variant

# Renewable power spreading out everywhere



Medium-Term  
Renewable Energy Market Report 2013

## Total Renewable Annual Capacity Additions, by region (GW)



- Emerging markets more than compensate for slowing growth and volatility in markets such as Europe and the US



Source: Wirz Solar, Mali

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## Constat

1.7 milliards de personnes n'ont toujours pas accès à des services en énergie

# Global Initiative Sustainable Energy for all

2011: UN Secretary-General Ban Ki-moon



L 'accès aux énergies durables pour tous -  
objectifs 2030:

1. Accès aux services en énergie;
2. Doubler le niveau d'efficacité énergétique global;
3. Doubler la part des énergies renouvelables dans le système énergétique mondial.



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# REPIC

une réponse suisse:

des grandes initiatives aux  
projets concrets

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# L'approche REPIC

## 10 ans de coopération:

- Phase I: 2004 – 2007
- Phase II: 2008 – 2010
- Phase III: 2011 – 2013

## Objectif de la plateforme REPIC:

Transfert de savoir et de technologies en vue du déploiement des énergies renouvelables et de l'efficacité énergétique dans les pays en voie de développement et en transition

1. Soutien aux projets
2. Réseaux, information et communication
3. Coordination et assurance qualité



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# Projets: challenges multiples

- Au delà du projet pilote
- Multiplication des projets
- Viabilité économique
- Infrastructure
- Formation
- Financement
- Risques multiples
- Conditions cadres
- Stabilité politique
- etc.

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# L'approche REPIC

## Principes

Projets réalistes, durables, orientés marché et répondants à un besoin local



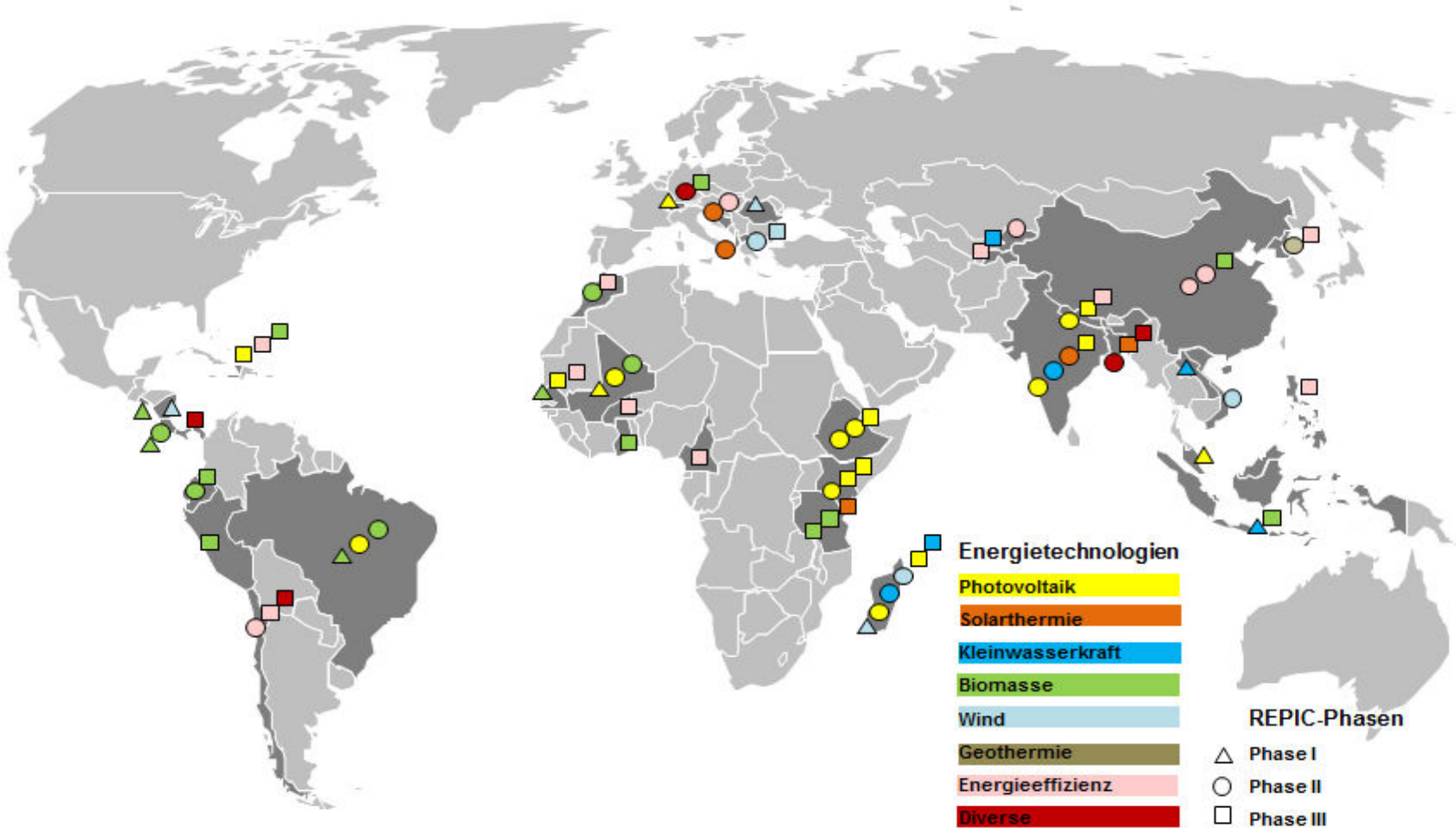
Caricature: S. Butz



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# Des projets dans le monde entier



# Exemple 1: Ethiopie – Solar Home Systems; Stiftung Solarenergie

## Etablir

- les structures (centres solaires et formation)
- la production
- des systèmes de financement



# Exemple 2: Brésil – Purification de l'eau sanitaire

- Etude de faisabilité
- Installation pilote pour la production de l'eau potable
- Joint Venture «Swiss Water Systems».
- Multiplication des installations pilotes
- Etablissement d'une production locale



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# Kontakt

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Source: Swiss Fresh Water, Sénégal