

Social and economic co-benefits of climate action in the global energy transition

5 Propositions

Sebastian Helgenberger
IASS | COBENEFITS Project

 @s_helgenberger

www.cobenefits.info

INTERNATIONAL CLIMATE INITIATIVE (IKI)

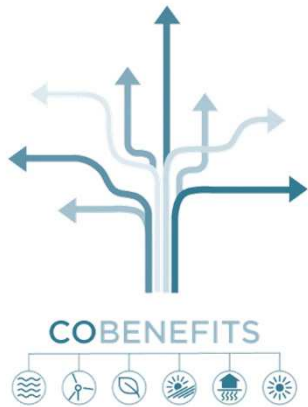


Supported by:



Federal Ministry for the
Environment, Nature Conservation,
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based on a decision of the German Bundestag



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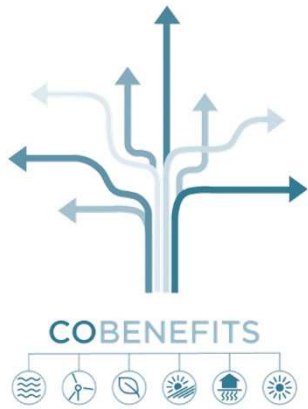
»Social and economic Co-benefits are driving global investments into clean energy«

»Health-related Co-benefits are among the top priorities worldwide«

»We can scale up clean energy globally by connecting to agendas beyond the sustainability mission«

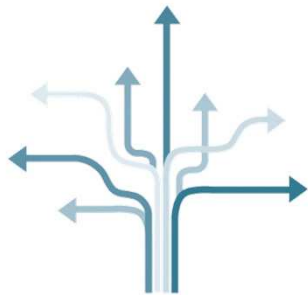
»While catastrophes get you attention, opportunities will deliver action«

»Without ownership no impact«



»Social and economic Co-benefits
are driving global investments
into clean energy«

Proposition #1



1,018,000,000,000 \$

global investments in the renewable energy sector

Leveraging the Social and Economic Co-Benefits of Ambitious and Early Climate Action

Making the Paris Agreement a success for the Planet and the People

The global transition to renewable and clean sources of energy is in full swing. Complementing climate action, the social and economic opportunities have spurred the growth of renewable energy generation in many countries.

These immediate co-benefits of climate policy and action include cleaner air and related health system benefits, new jobs, a secure and independent energy supply, improved energy access, and rural development.

Creating a robust and opportunity-oriented roadmap for the implementation of the Paris Agreement to harness the benefits for countries' sustainable development efforts will spur momentum for ambitious and climate action, both domestically and in the context of the UNFCCC.

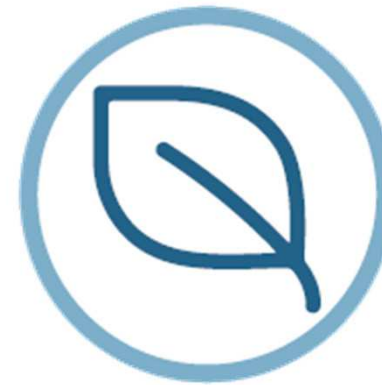
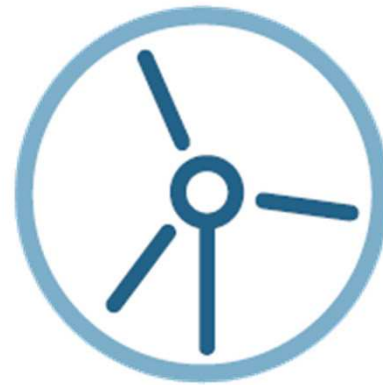
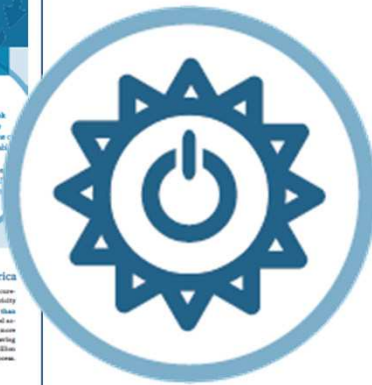
Sharing social and economic opportunities

India
Over 100,000 workers will be employed in the next five years to achieve India's clean energy targets. Jobs created from renewable energy offer a significant opportunity to meet the government's objective of mass employment generation.

South Africa
By the end of 2017 with its Independent Power Producer Program for Renewable Electricity targets, the country has attracted investments of more than 200 billion USD and generated an economic value creation of more than 100 billion USD while saving carbon emissions of 12 million tons in CO₂ in the process.

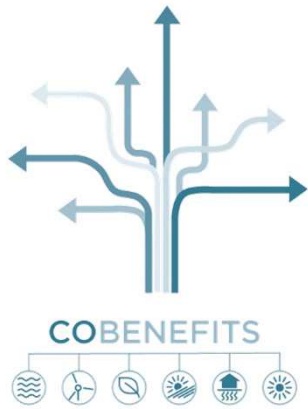
Germany
With its long-term plan to increase share of renewable energy in heating and electricity, Germany is leading countries in its energy system. By 2022 installing more than 1,000 offshore energy competitive across the country and more than 100 GW renewable electricity, creating direct revenue for citizens and local communities.

Worldwide
More than 50 million people are employed in the renewable energy sector. More than 100 million people are expected to be employed in the global energy sector by 2025. The global energy sector could save up to 4 million lives annually by reducing carbon emissions.



In the past 3 years...

Source: BNEF 2018, IASS 2018



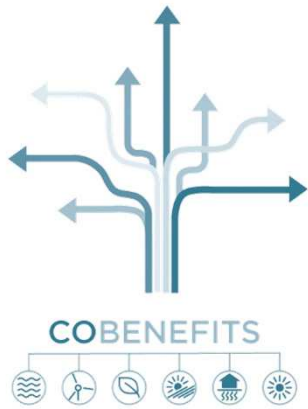
The **IASS COBENEFITS** Approach: Mobilizing the Co-Benefits of Renewable Energy and Energy Efficiency for ambitious Climate Action



Source: IASS 2017

Multiple Social & Economic Opportunities drive global investments in the new energy world





»Health-related Co-benefits
are among the top priorities
worldwide«

Proposition #2



Reduced electricity costs for residential prosumers and businesses through renewable energy self-consumption



Employment opportunities through renewable electricity systems across different skill levels



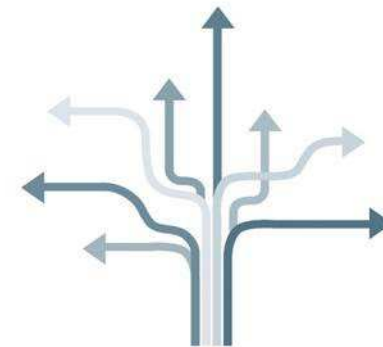
Economic prosperity in marginalized communities through growing share of renewables



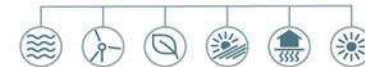
Health benefits of growing share of renewable energy in the electricity sector



Reliable power generation with wind and solar PV in times of water scarcity



COBENEFITS



INTERNATIONAL CLIMATE INITIATIVE (IKI)



COBENEFITS Research Methods Workshop, South Africa

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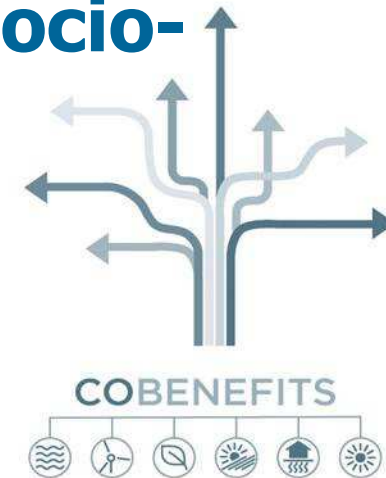


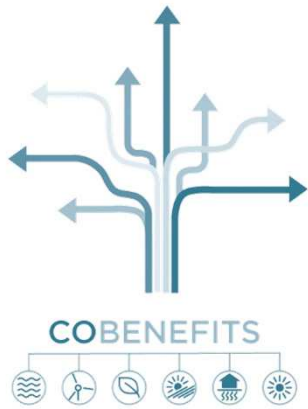
our future through science

Addressing the agendas of Ministries of Finance, Labour, Development etc by **framing health benefits in a socio-economic perspective**



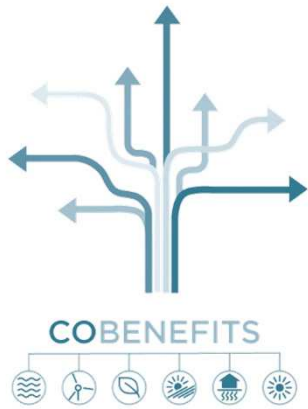
Health benefits of growing share of renewable energy in the electricity sector





»We can scale up clean energy globally by connecting to agendas beyond the sustainability mission«

Proposition #3

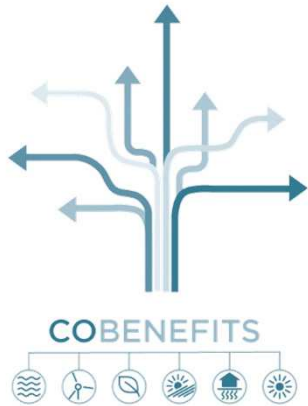


»We can scale up clean energy globally by connecting to agendas beyond the sustainability mission«



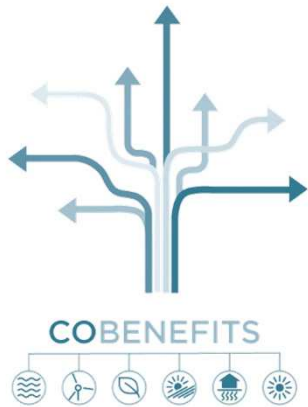
Global Climate & Sustainability Agenda

The „other“ Agendas



»While catastrophes get you attention, opportunities will deliver action«

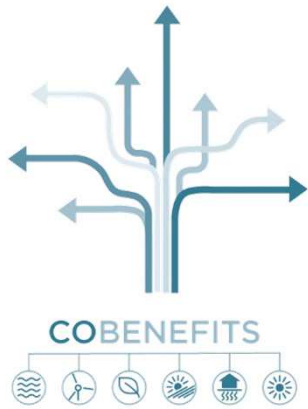
Proposition #4



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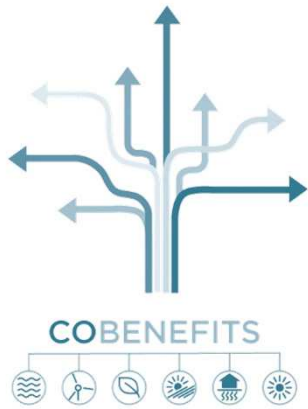
Proposition #4

**Opportunities =
“What’s in for me?” & “I can do it!”**



»Without ownership
no impact«

Proposition #5



»Without ownership
no impact«

Proposition #5

- Project Co-Design with (political) target groups
 - Needs and Interest-orientation





Connecting the social and economic opportunities of renewable energies to climate change mitigation strategies.

www.cobenefits.info

Twitter

Tweets by @IKI_COBENEFITS

Latest News

COBENEFITS Cross-Country Methodology Exchange

July 12, 2018

This July, we are hosting a number of virtual [...]

Petersberg Climate Dialogue: „Speed up Transformation to Boost Co-Benefits“

July 10, 2018

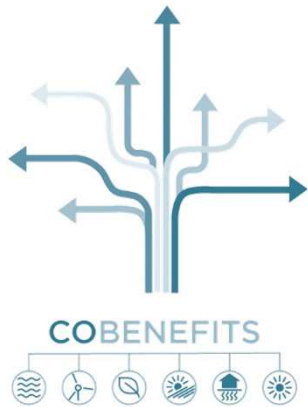
During the Petersberg Climate Dialogue IX that took [...]

Cobenefits Starts in Turkey with First Council Meeting

May 4, 2018

The long-awaited official initiation of the Turkey [...]





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IASS BLOG
Institute for Advanced Sustainability Studies (IASS) | Potsdam

Social Benefits of Renewable Energies
Creating the Environment for Societal Ownership – Lessons learned from Germany's Energiewende

Boosted by impressive technological innovation and cost reductions, renewable energy in a growing number of countries is now primarily considered for its social and economic benefits. Among these benefits are opportunities for local value creation, for responding to growing energy demands and for reducing conflicts over scarce water, which are aggravated by fossil power generation. Allowing for distributed electricity generation, the rapidly expanding renewable energy world is opening up business models for many, including local communities, citizens and citizens' cooperatives. Domestic energy policy can shape the enabling environment to seizing the social benefits of renewable energy.

Sebastian Helgenberger

Renewable Energies – A Multi-benefit Opportunity

IASS WORKING PAPER
Institute for Advanced Sustainability Studies (IASS)
Potsdam, July 2017

Mobilizing the co-benefits of climate change mitigation

Connecting opportunities with interests
In the new energy world of renewables

Sebastian Helgenberger
and Martin Jänicke

IASS POTSDAM

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Potsdam, July 2017

Generating socio-economic values from renewable energies

An overview of questions and assessment methods

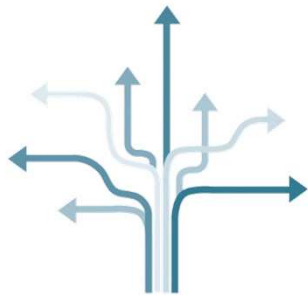
Sylvia Borbonus

IASS POTSDAM

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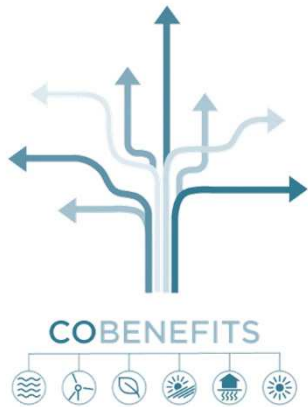


Dr. Sebastian Helgenberger
Institute for Advanced Sustainability Studies Potsdam
Project Director **COBENEFITS**
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COBENEFITS





Introducing: the Institute for Advanced Sustainability Studies



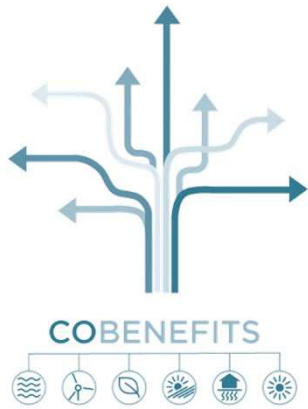
IASS: Sustainability & Opportunity

"While catastrophes will get you attention,
opportunities will deliver action"

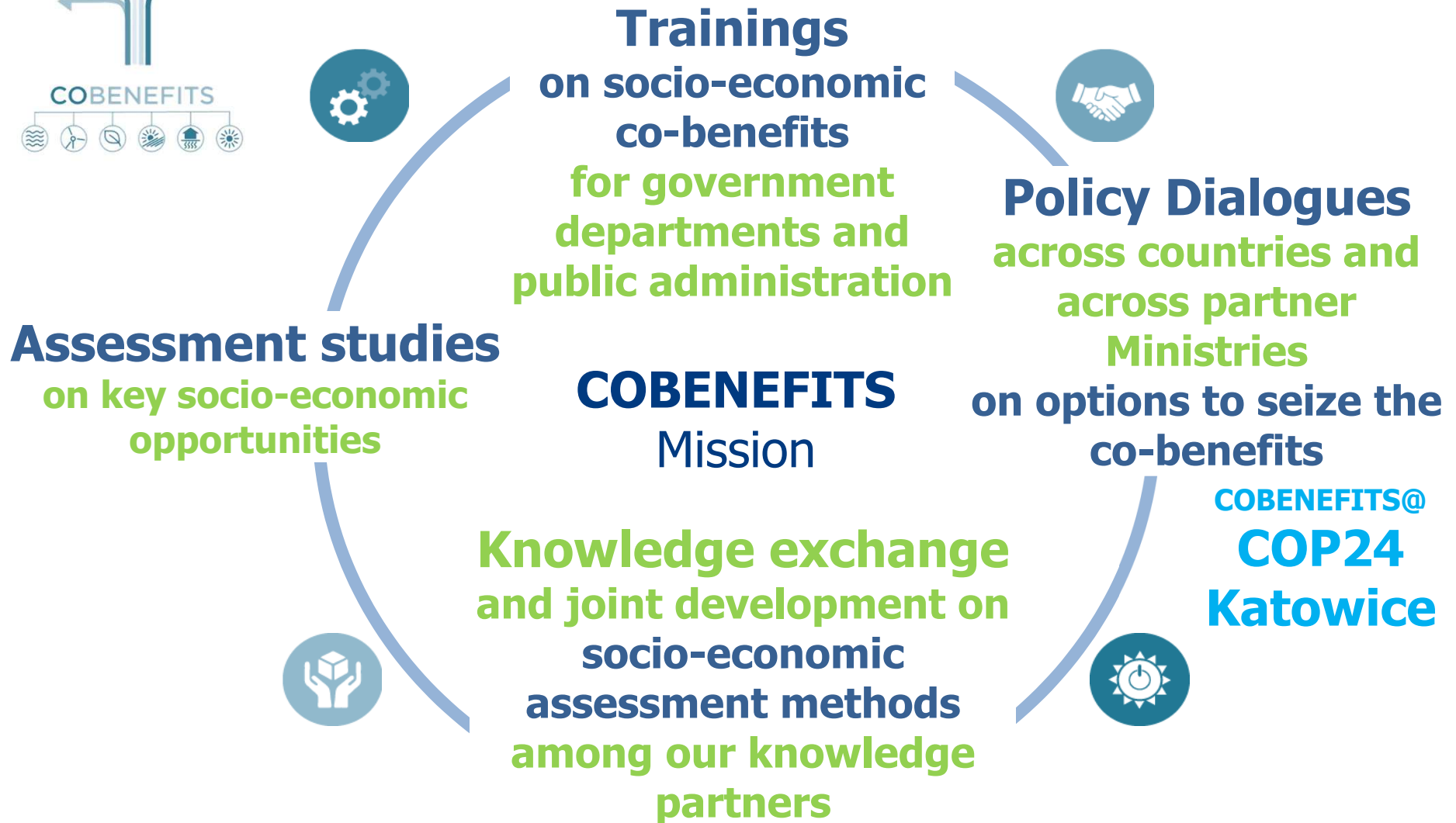
- Founded in 2009 by former UNEP director Klaus Töpfer
- in Potsdam, Germany
- as independent research institute and think tank
- committed to inspire and support sustainability transformations
- staff size 150 (2018)

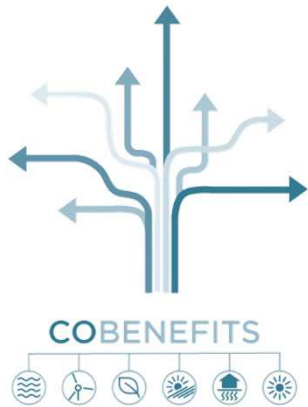
Project Co-Design among
science and society





The **IASS COBENEFITS** Approach: Mobilizing the Co-Benefits of Renewable Energy and Energy Efficiency for ambitious Climate Action





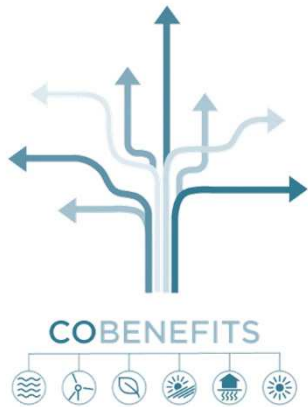
The **IASS COBENEFITS** Approach: **Creating impact**



- **Connecting opportunities with interests:** context-specific and interest-oriented co-benefit assessments
- **Connecting Co-benefit assessments to country-specific policy formulation + implementation** (e.g. NDC, SDGs, energy roadmaps)
- **Creating ownership** through intense and productive science-policy interactions

Strategic
Co-Benefits
Assessments
IASS (2017)

www.iass-potsdam.de
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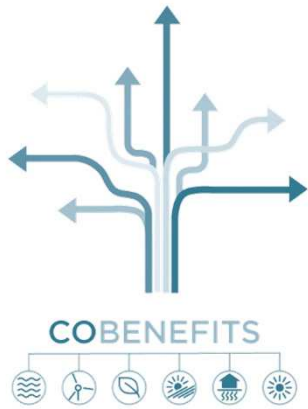
The **IASS COBENEFITS** Approach: **Creating impact**



- **to date 12 country-specific Co-Benefits Assessment Studies in 4 countries in 2018**
- **15 science-policy workshops in 2017/2018**
- **Collaborating with 20 research partners and 18 partner Ministries**
- **Development of Training and Capacity Building Programmes**

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Mobilizing the co-benefits of climate change mitigation
 Connecting opportunities with interests
 In the new energy world of renewables

Sebastian Helgenberger
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IASS POTSDAM



The Institute for Advanced Sustainability Studies in Potsdam, Germany conducts policy-oriented research and consultancy on the Sustainable Development Goals (SDG) and implementing the Paris Agreement mobilizing the social and economic opportunities of an global energy transition to renewables

Leveraging the Social and Economic Co-Benefits of Ambitious and Early Climate Action
 Making the Paris Agreement a success for the Planet and the People

The global transition to renewable and clean sources of energy is in full swing. Complementing climate action, the social and economic opportunities have spurred the growth of renewable energy generation in many countries.

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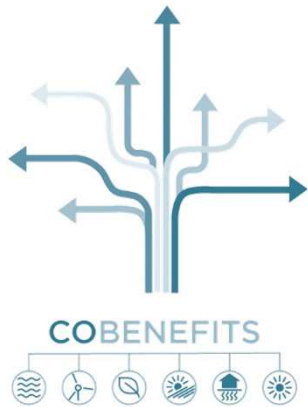
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Germany
 with its long-term plan to increase its share of renewable energy to 65% by 2030, Germany is leading the way in the energy sector, by 2022 installing more than 1,500 GW of renewable energy capacity across the country and more than 100 GW renewable electricity, creating direct revenue for citizens and businesses.

Worldwide
 more than 10 million people are employed in the renewable energy sector. What's more, doubling renewable in the global energy mix could save up to a million lives annually by reducing outdoor air pollution.



COBENEFITS Implementing Partners in Germany



The Institute for Advanced Sustainability Studies in Potsdam, Germany conducts policy-oriented research and consultancy on the Sustainable Development Goals mobilizing the social and economic opportunities of an international energy transition



The Renewables Academy AG (RENAC), based in Berlin, Germany, is a leading international expert for training and capacity building on renewable energy and energy efficiency.



The Independent Institute for Environmental Issues (UfU) takes an application-oriented and social-ecologic approach to issues such as environmental law, resource management and education for climate action.



IET – International Energy Transition GmbH is a Berlin based consulting firm providing advisory services for the transition towards clean energy systems, integrating increasing shares of renewable energy sources

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