

# CLIMATE RISK MANAGEMENT & BUSINESS OPPORTUNITIES - THE TOURISM SECTOR IN COSTA RICA -

Why adaptation to climate change matters for businesses!



**“Companies should not see climate change as an environmental problem but rather as a market transition”**

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## Climate change is ALREADY taking place in Costa Rica...



**The temperature rises:** Central America is among the most vulnerable regions to climate change. The average temperature in the region has increased 0.54°C in the last 50 years.



**Extreme weather events become more frequent:** Costa Rica is highly exposed to the rise of the sea level and its temperature as well as to the increasing variability of precipitation, landslides, floods and droughts.



**The costs are very high:** Extreme weather events cost Costa Rica US\$ 1.13 billion between 2005 and 2011.

## ...and will become more severe in the FUTURE



**Further temperature increases:** Between 2012 and 2050 the average temperature in Costa Rica will rise between 1 and 4 °C.



**Irregular precipitation patterns:** Rainfall will increase in some regions and decrease in others.

## A changing climate puts the tourism sector at RISK

- The increase in the frequency and intensity of extreme weather events generates large human and economic losses and decreases the safety of the destination.
- Higher temperatures increase costs (e.g. air conditioning), hinder tourism-related activities and reduce the attractiveness of the destination in the summer - although they maintain (or even increase) its attractiveness in the winter.
- Water scarcity provoked by changing precipitation patterns affects fragile ecosystems (e.g. cloud forest) negatively.
- Rising sea levels might generate gradual economic losses in coastal areas, while the increase in sea temperatures might threaten the marine biodiversity and reduce the offer of recreational activities (e.g. scuba diving).

Sources: INDC Costa Rica (2015); INCAE (2015): Estudio de Contexto. Adaptación al Cambio Climático en el Sector Turismo de Centroamérica. CEPAL; MINAET (2012): Escenarios de Cambio Climático Regionalizados para Costa Rica y CCAD (2012): La Economía del Cambio Climático en América Latina y el Caribe, Paradojas y desafíos del desarrollo sostenible.

## What ADAPTATION to climate change means for ENTERPRISES



Ensuring **BUSINESS CONTINUITY** by **BUILDING RESILIENCE** to negative climate impacts



Creating **COMPETITIVE ADVANTAGE** through **positive side-effects** of adaptation measures, e.g. by increasing efficiency, creating reputational effects



Creating **BUSINESS OPPORTUNITIES** from climate change through **NEW PRODUCTS & SERVICES**

## Climate change adaptation MEASURES are available for the tourism sector



Information sign on climate change at Parque Nacional Cahuita

### Short- and mid-term measures

- Construction of natural barriers and other infrastructure against storms, sea level rise and floods.
- Risk insurance to transfer risks caused by extreme weather events.
- Emergency evacuation and supply storage planning.
- Improvements in water and energy efficiency.

### Long-term measures

- Capacity-building scheme aimed at employees concerning climate change impacts.
- Early warning systems.
- Diversification of tourism services and regional economy.
- Communication and joint action within the value chain.
- Reforestation as a mean to control and reduce erosion and provide shade in the face of rising temperatures.



Reforestation program in Costa Rica

## COMPANIES in COSTA RICA are already adapting to climate change



Anaerobic digester at a coffee farm in Honduras

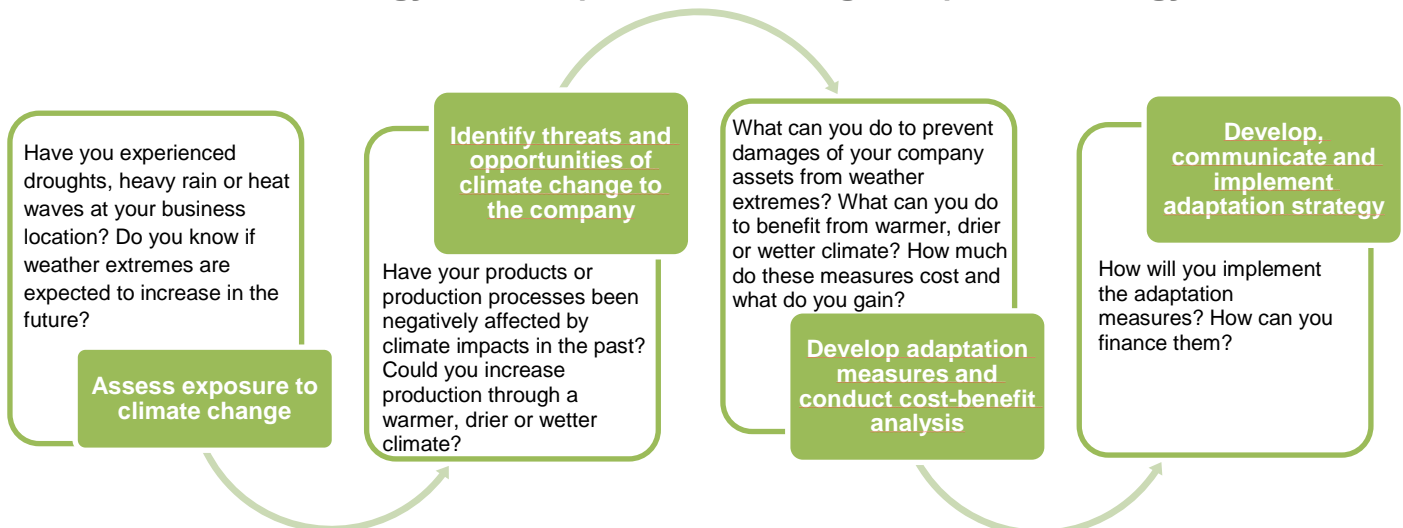
- A hotel close to Saraquipí river has installed an **anaerobic digester that produces biogas from cow dung**. The hotel thus generates locally almost all of its energy needs and is more resilient in the event of power outages.
- In Escazú, a hotel has built a **rainwater harvesting and storage system** that allows it to **reduce its reliance** on the municipal water network.
- Another hotel located in Nicoya has implemented a **reforestation initiative** as a mitigation and adaptation measure in the Tenorio-Miravalles biological corridor. The initiative is led by local environmental association.



Rainwater harvesting system in Sri Lanka

## PREPARE for climate change – TAKE ACTION and adapt

### Methodology to develop a Climate Change Adaptation Strategy



## Building resilience and increasing competitiveness of the private sector in Costa Rica

### GIZ supports the private sector in Costa Rica in its adaptation efforts

The GIZ global programme 'Strengthening the Capacities of the Private Sector to Adapt to Climate Change' (from 2014 until 2017) supports associations, private enterprises and consultants in their efforts for climate change adaptation. Under the project pilot activities with private sector actors will be implemented in Bangladesh, Central America, Morocco, and Rwanda.

#### Our offer for businesses

- Individual climate change adaptation assessments
- Trainings on climate change adaptation and access to adaptation finance
- Value chain analyses on adaptation

#### Our offer for public authorities

- Providing awareness raising materials on climate change adaptation in the private sector
- Dialogue rounds with private sector actors on climate change adaptation

#### Our offer for associations

- Training of Trainers on climate change adaptation assessments of companies
- Providing awareness raising materials on climate change adaptation in the private sector

#### Our offer for financial institutions

- Dialogue round on financing needs of private sector actors
- Matchmaking between companies seeking funding for adaptation measures and financing institutions



### Get in touch

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