

# **Dii Toolkit Initiative**

Dii Toolkit for RE Grid Integration, Project Development & Industry Localization

Dii Desert Energy

Fadi Maalouf 20<sup>th</sup> Oct 2018

### **Document History**



#### **DOCUMENT CHANGE HISTORY RECORD SHEET**

Document Title / Number	Rev.	Description Of Change	Effective Date
Dii Toolkit Initiative	R1	Initial Release – For Information	17-Aug-2017
Dii-Toolkit-Initiative-fm170817-R1			
Dii Toolkit Initiative	R2	Updated – For Information	23-Sep-2017
Dii-Toolkit-Initiative-fm170923-R2	T\Z		
Dii Toolkit Initiative	R3	Updated – For Information	21-May-2018
Dii-Toolkit-Initiative-fm180521-R3	NO NO		
Dii Toolkit Initiative	R4	Updated – For Information	20-Oct-2018
Dii-Toolkit-Initiative-fm181020-R4			

Category	Name	Designation	Signature	Date
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### Outline



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## Introduction Dii Objectives



#### **Desertec Industrial Initiative (Dii)**

was launched in 2009 as a 'not-for-profit' entity in Germany for exploring the potential of renewables in the desert areas of Northern Africa and the Middle East, improving market conditions and examining the synergies to be captured through connecting the European and MENA power markets.



#### **Dii Vision**

Increased competitiveness of renewables shall swiftly lead to economic growth and secure near 100% renewable based power supply without emission or waste.

#### **Our Mission: No Emissions!**

Towards a fully emission free power supply in MENA, Encourage and support the deployment of utility-scale renewable energy projects and integrating them in the expanding interconnected power systems for greater local and regional benefits.

#### **Dii Strategy**

Connecting the international industry active in the MENA region with authorities and institutions. Focus on practical country specific issues of renewable energy projects and grid integration in the region and interconnections across countries leading to tangible and profitable projects and other benefits to the market.

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### Introduction Dii Partners



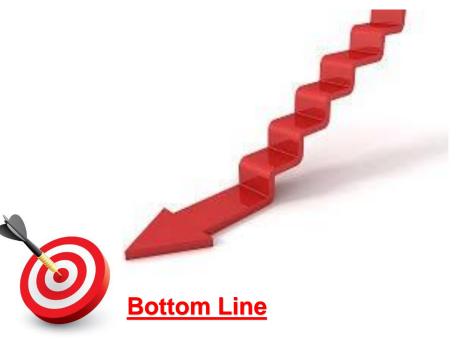


#### Dii Toolkit for RE Grid Integration, Project Development & Industry Localization

# Why Toolkit?

- In the ever-evolving energy markets, the power of information and in particular know-how, innovation, & collaboration, are key success factors.
- So What Is The Bottom Line?
- Use Top Down Analysis
- Q&A To Establish Workflow!

#### **Objective: Accelerate RE Implementation**





# Why Toolkit?

**Q:** What accelerates RE implementation?

- A: Creating RE project opportunities.
- **Q:** Who creates RE opportunities?
- **A:** By connecting RE talent to drive innovation.
- **Q:** What is the basis RE talent?





# Why Toolkit?





- The Dii Toolkit "Establishes RE Knowledge Base" thus enabling talent connection, opportunity creation, & therefore renewable energy implementation acceleration.
- Dii Toolkit Initiative sets a solid foundation for achieving the goal of energy independence via renewable energy, therefore accomplishing Dii Objectives.

## **Toolkit Description**



- Dii's "Toolkit for Renewable Energy Grid Integration, Project Development & Industry Localization" is derived from Dii's partners as well as Renewable Energy (RE) industry expert professionals know-how, experience, & best practices.
- The objective of the Dii's Toolkit is to provide RE industry stakeholders, both private and public, with access to state-of-the-art measures & techniques (tools) which enable accelerated and smooth integration of large amounts of renewable energy into existing power grids & ensure tangible and durable benefits to the region.

Dii Toolkit scope of work includes:

- Tools & checklist for bankability of RE projects, system requirements for RE grid integration, operators' technical capability to manage high levels of variable RE generation, local industry & job creation & retention factors, business transparency factors.
- Practical tips on project development, public and private procurement and localization, thus assuring: best value for money, industry involvement, job creation, sound financing, transparency & build of trust amongst stakeholders.
- Planning for gradual increase of RE generation at local, national, regional and international scale.
- Country case studies & sharing of know-how & expertise.
- The Toolkit database will be available at Dii's website platform, exclusively for Dii's partners & network members.

## **Toolkit Approach**



- Dii Toolkit Approach to Creating Value and Knowledge Base
- WHAT TO DO vs. HOW TO DO

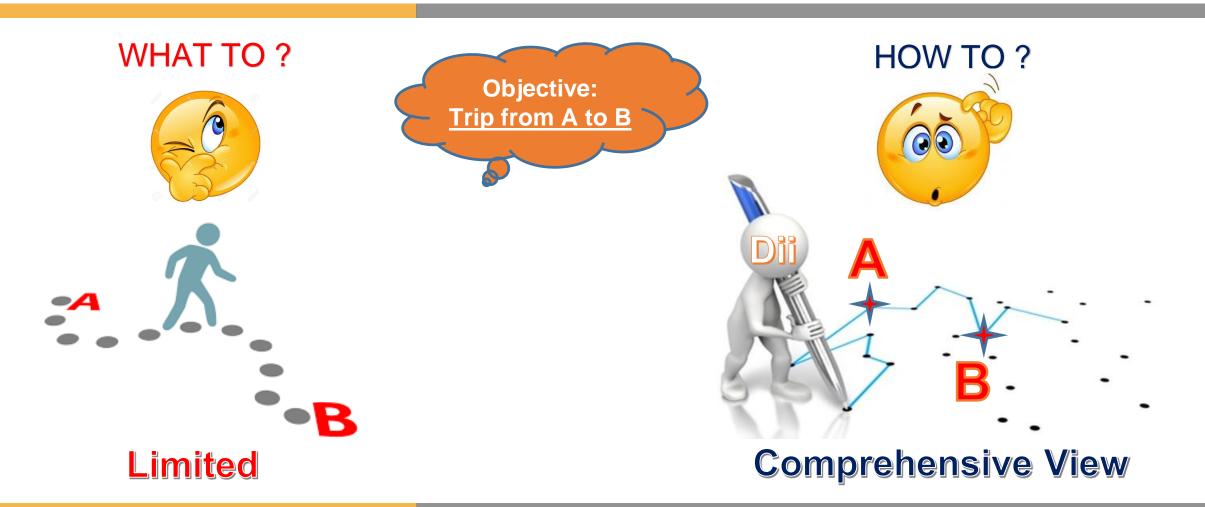




# WHAT TO DO? HOW TO DO?

### **Toolkit Approach**

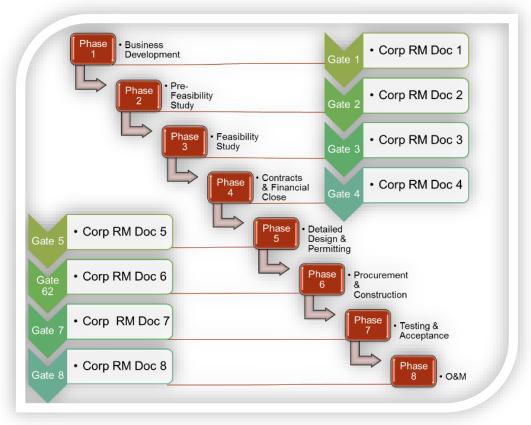


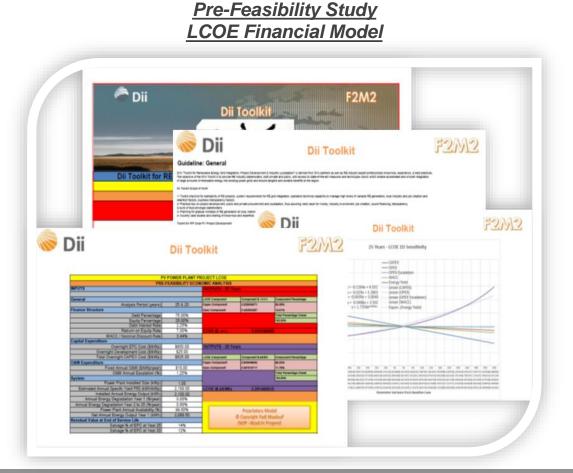


## **Recent Publications How To?**



IPP Solar PV Project Development Roadmap 8-Phase Bankable Approach!





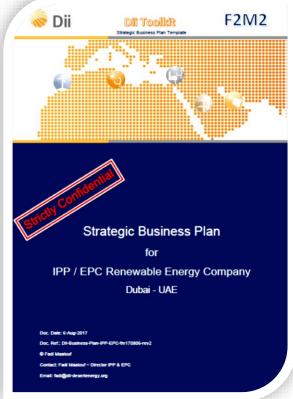
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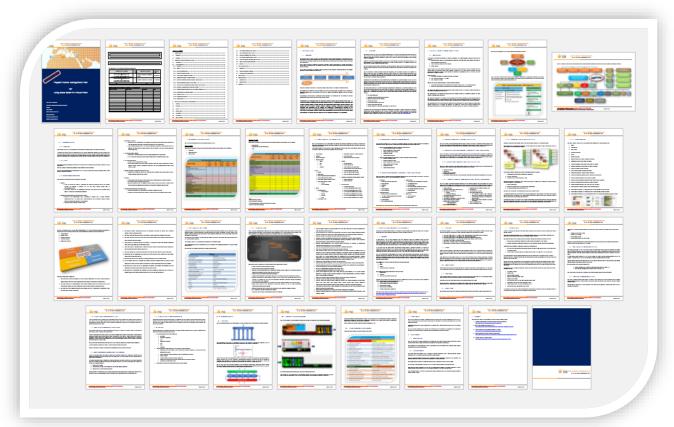
## **Recent Publications How To?**



#### <u>Strategic Business Plan</u> for IPP / EPC Renewable Energy Company



#### <u>Project Finance Management Plan</u> for Utility Scale Solar PV Power Plant

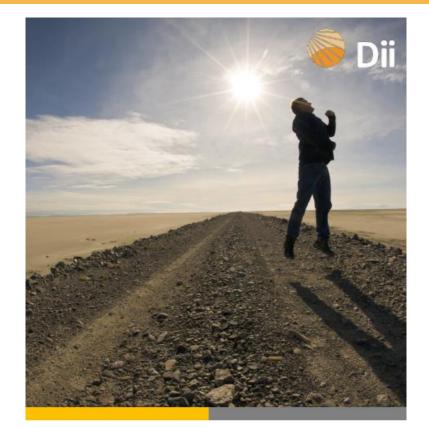


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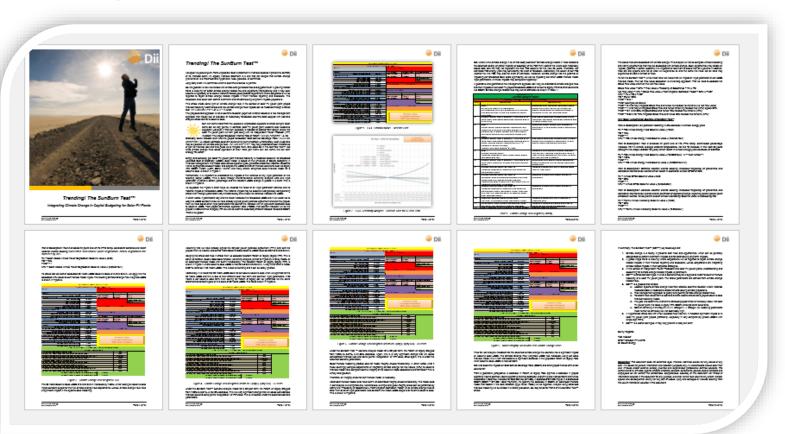
### **Recent Publications How To?**





Trending! The SunBurn Test™ Integrating Climate Change in Capital Budgeting for Solar PV Plants

#### <u>Trending! SunBurn Test™</u>



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# Thank You

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