CAREC RETA for New Technologies

RETA #1: Increase Electricity Access Using Off-Grid Solar Power and New Technology

RETA #2: Enabling CAREC Countries for Technology Leapfrogging to Tackle Climate Change



New technology adoption is slow in **CAREC** Mindset that new Lack of awareness on new Low credibility of new Lack of human capital High cost technology is technology technology expensive Allocation of higher risks to Lack of/limited Proliferation of cheap, poor Lack of presence of Lack of technical capacity new technology by the information on benefits quality products regional manufacturers of the industry of new technology private sector No incentives to develop High transaction costs No regional promoters of Limited workers' Small initial early adopters new technology (Private for new technology new technology with aptitude/educational market sector cannot capture projects because of credibility level public goods) _inventory cost Market entry barriers Lack of demonstration No regional Unclear and inadequate No common regional market including fossil fuel projects to quantify accreditation scheme subsidies and low tariffs regulatory provisions to attract large market and show benefits for renewable energy or energy efficiency professionals Fragmented and isolated product markets No school curriculum in place on new technology and climate change



Proposed Investment Projects by Each Country

(Based on brainstorming session on 29 July in Tokyo and updated on 9 September in KL)

Project No.		AFG	AZE	KAZ	KGZ	MON	PAK	TAJ	TKM	UZB
	A. Supply Side									
1	Solar powered micro-grid for remote areas	1			1			✓		
2	Adoption of clean coal technologies in power generation			1		√	✓			
3	Improve efficiency of solar industry / establish new industry					√			√	
4	Solar off-grid to reduce demand from diesel	1			1	✓	✓	√		
5	Recycling of municipal waste for power generation	√		√			√	√		√
	B. Electric Vehicle and Storage									
6	Battery based grid storage for reliability improvement of renewable energy			√		√		✓		1
7	Electric vehicles (bus, cars, motorcycles and scooters) pilot for government fleet and public transport	✓	✓	1			1	√	✓	1
	C. Demand Side and Distribution Efficiency									
8	Demand responses through smart meters and diversified tariffs									√
9	LEDs for public lighting and offices	1	✓		✓		✓			
10	Efficiency in distribution efficiency and loss reduction			√	✓		1	1		1
11	Improve load dispatch systems and distribution control with SCADA	✓			1	√		√		√
12	Reduce heat losses in office buildings by retrofitting				√	√			Á	DB

Proposed on 9 September 2015 in KL; For AZE and TKM, proposed in Tokyo on 29 July 2015

Proposed Investment Projects by Each Country

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Project No.		AFG	AZE	KAZ	KGZ	MON	PAK	TAJ	TKM	UZB
	B. Electric Vehicle and Storage									
7	Electric vehicles (bus, cars, motorcycles and scooters) pilot for government fleet and public transport	✓	√	✓			1	√	√	1
	Electric bus	√		√			√	√		✓
	Electric cars	✓		√			√	√		✓
	Electric motorcycles							✓		
	Electric scooters							√		

[✓] Proposed in Tokyo on 29 July 2015 and confirmed in KL on 9 September 2015 (AZE and TKM did not participate in KL)



[✓] Additional information provided on 9 September 2015 in KL; For AZE and TKM, proposed in Tokyo on 29 July 2015

RETA #1: Increase Electricity Access Using Off-Grid Solar Power and New Technology



#1: Increase Electricity Access Using Off-Grid Solar Power and New Technology

Impac

Increased access of power using off-grid technology.

Outcome

Off-grid electrification is mainstreamed in ADB's operation.

Output

- The Project will develop studies, workshops, financial and technical package, including:
 - 100 off-grid solar kits distributed to 5 of the CAREC member countries;
 - Open source design available for developing new businesses by private sector; and
 - Hands-on training and technical materials developed and distributed through social media and other appropriate channels.

RETA #2: Enabling CAREC Countries for Technology Leapfrogging to Tackle Climate Change



#2: Enabling CAREC Countries for Technology Leapfrogging to Tackle Climate Change

Impact

 The impact of the proposed TA will be increased energy security among CAREC countries through promotion and use of new technologies.

Outcome

 Energy systems in CAREC countries are built or rehabilitated with new technology.



#2: Enabling CAREC Countries for TechnologyLeapfrogging to Tackle Climate Change

Output

- The Project will develop studies, workshops, financial and technical package, including:
 - Demonstration of select new technologies;
 - Open source design available for developing new businesses by private investors and entrepreneurs;
 - Recommend an enabling framework on new technologies regulation and accreditation;
 - Trainings and capacity building on new technology planning and forecasting;
 - Establishment of Central Asian Regulators' Network and associated training of the regulators; and
 - Establish technology partnerships.





Nissan LEAF

Electric Vehicle Sedan

107 miles (pure electric) \$29,000

full review

photos

news

The Nissan LEAF is by far the most popular EV in the world. It is a well-equipped, all-electric hatchback that seats five adults and can travel up to 107 miles on a single charge. The LEAF is available to testdrive and purchase at Nissan dealerships throughout the United States.



Tesla Model 3

Electric Vehicle Sedan

200 miles (pure electric) \$35,000

full review



photos



news

Tesla would have to defy all expectations to achieve success on the Model 3, while avoiding all the potential pitfalls-not only for the 200-mile \$35,000 Model 3, but a massive new battery factory, and the Model X that comes first. Can Tesla do it again?

http://www.plugincars.com/cars

