Pursuing Green Road Opportunities in Tajikistan

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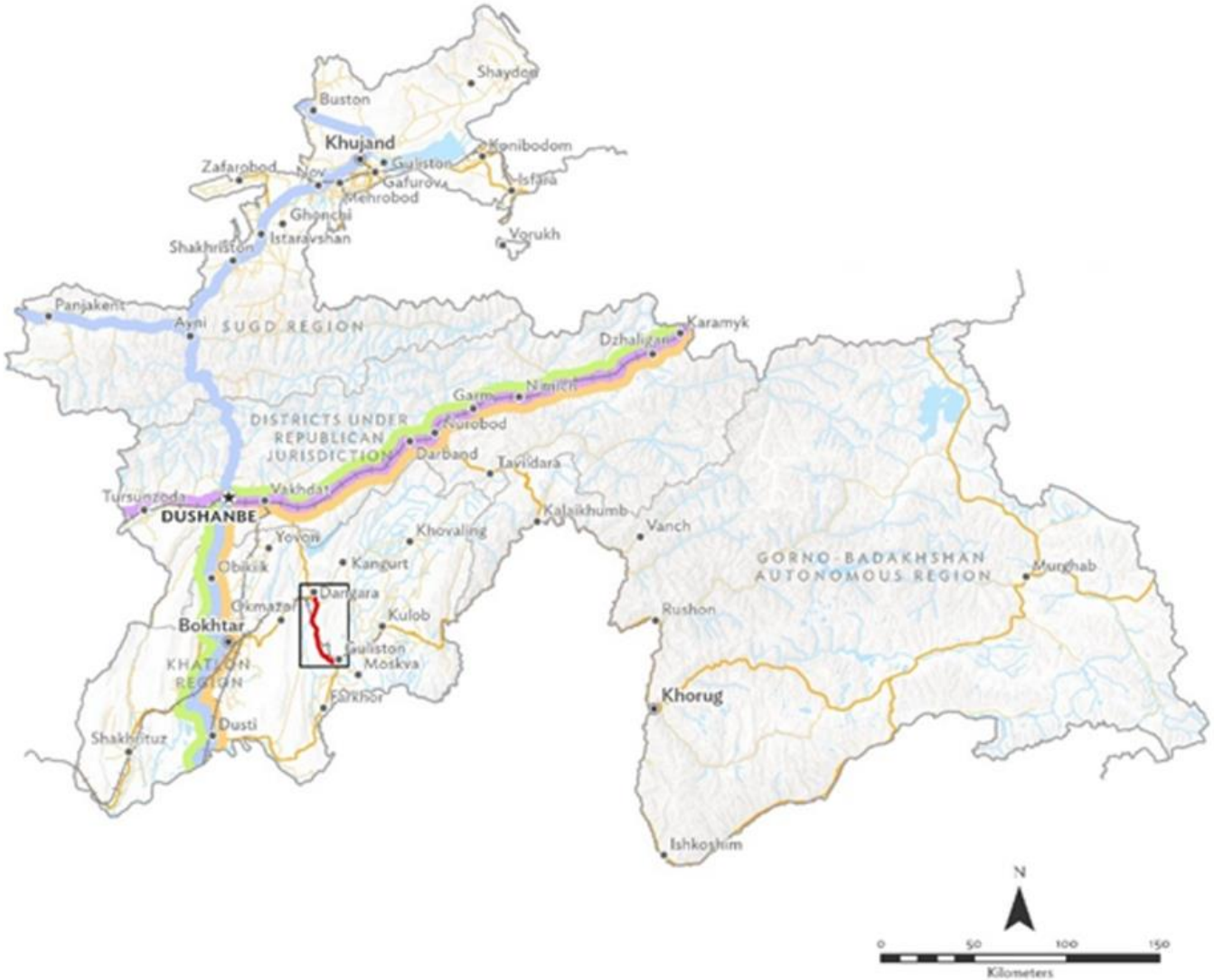
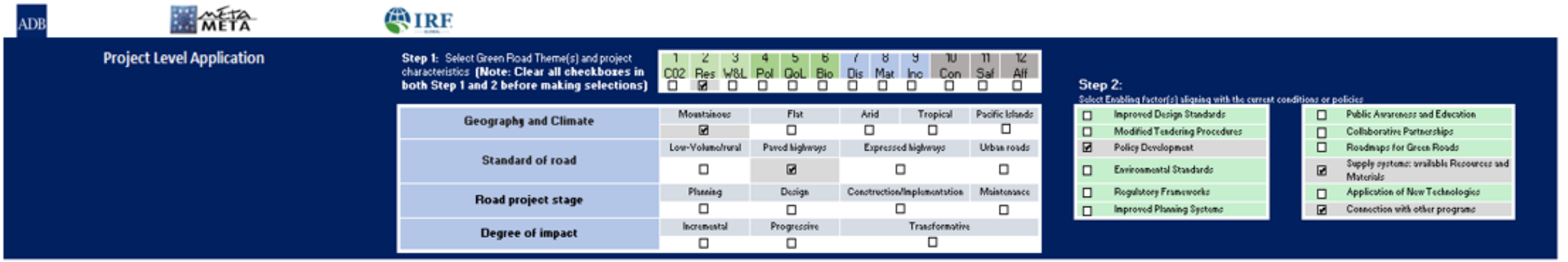


Existing conditions

Existing conditions

Generating green road options



Green Road Practices found: 48

GR objectives served: ● Core contributions ○ Secondary contributions

Enabling factors

Green Road Theme	Intervention Area	No.	Pracitce Name	1 C02	2 Res	3 W&L	4 Pol	5 QoL	6 Bio	7 Dis	8 Mat	9 Inc	10 Con	11 Saf	12 Aff
1. Decarbonization	1.4. Vegetative measures to sequester CO2	1.4.1	Roadside tree planting for sequestering CO2	●	○	○	○	○	○			○		○	
2. Climate Resilience	2.1. Resilient routing/ avoiding vulnerable areas	2.1.1	Moving roads out of channel migration zones		●	○									
2. Climate Resilience	2.1. Resilient routing/ avoiding vulnerable areas	2.1.2	Avoid unstable and wet areas		●	○				○					
2. Climate Resilience	2.2. Climate resilient road drainage design	2.2.1	Preventing stream diversion at road-stream crossings		●		○			○				○	
2. Climate Resilience	2.2. Climate resilient road drainage design	2.2.2	Avoid using multiple small culverts		●										
2. Climate Resilience	2.2. Climate resilient road drainage design	2.2.3	Climate resilient culvert design		●	○				○					
2. Climate Resilience	2.2. Climate resilient road drainage design	2.2.4	Road surface drainage to prevent water concentration		●		○			○	○				
2. Climate Resilience	2.3. Increased Stabilization of road sides	2.3.1	Complete ground cover in disturbed areas		●	○									

Identified opportunities

THEME		INTERVENTION	
1	Decarbonization	**1.1**	**Reuse of existing road material**
		1.2	LED lighting
		1.3	**Roadside tree planting**
2	Climate resilience	**2.1**	**Bio-engineering sections in critical sections**
		2.2	**Rethinking road drainage in critical sections**
3	Water management	3.1	Mudflow control from the top
		3.2	Explore water reuse options
4	Controlling pollution	4.1	Safe decommissioning of petrol stations
		4.2	Rethink de-icing strategies
		4.3	Use of bio-accumulator plants in roadside vegetation
5	Quality of life	5.1	Blossom road in roadside tree planting
		5.2	Roadside tree planting
6	Biodiversity	6.1	Additional underpasses
9	Inclusive growth	**9.1**	**Local sourcing plan to optimize engagement of local capabilities**

Marginal cost of agreed measures

Engineer's estimate:	**$120 million**
Cost of additional agreed measures :	**$424,000 or 0.35%**

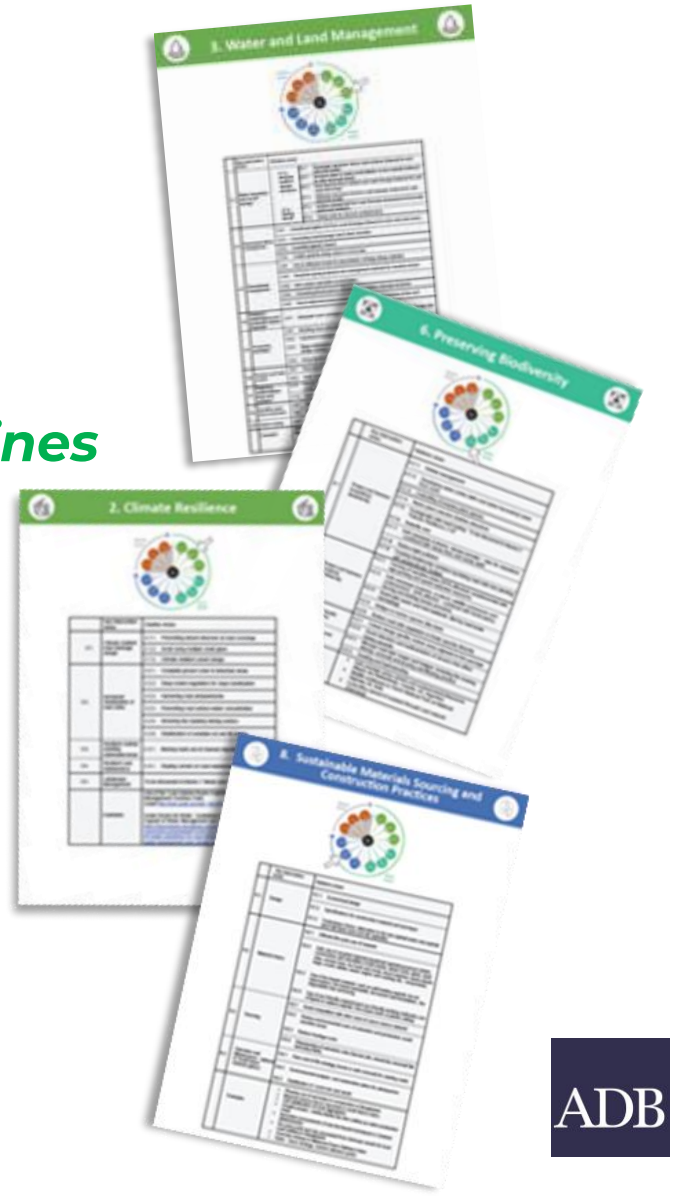
Next steps

Supervising Engineer & ADB Project Officer to continue option identification

Development of *Tajikistan National Green Road Design Guidelines* for government approval in 2026

ADB development of a web based option generator

<u>150</u> best practice sheets and increasing



Thank you!

Lets please keep talking.

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