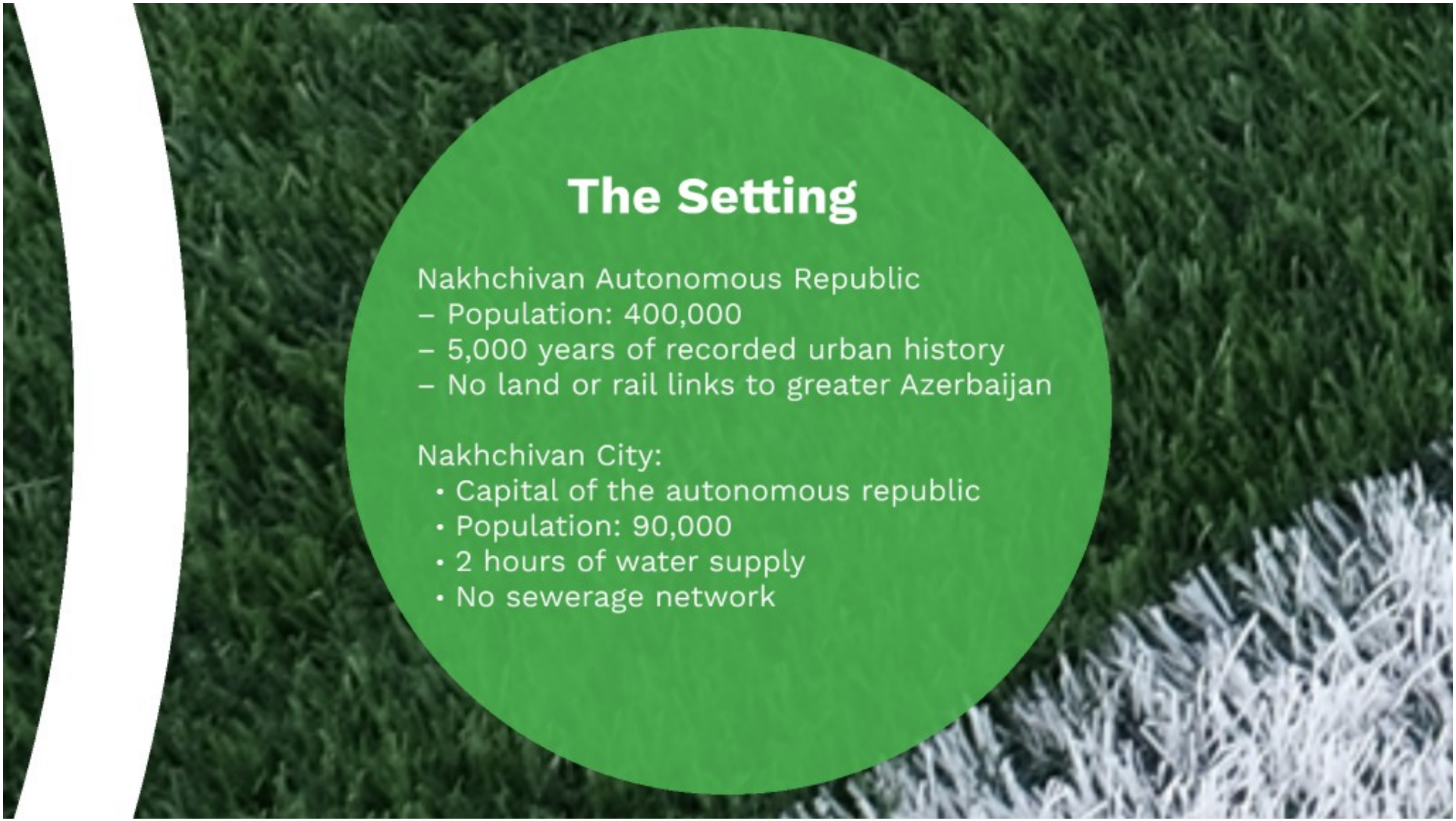
Overview

The Setting

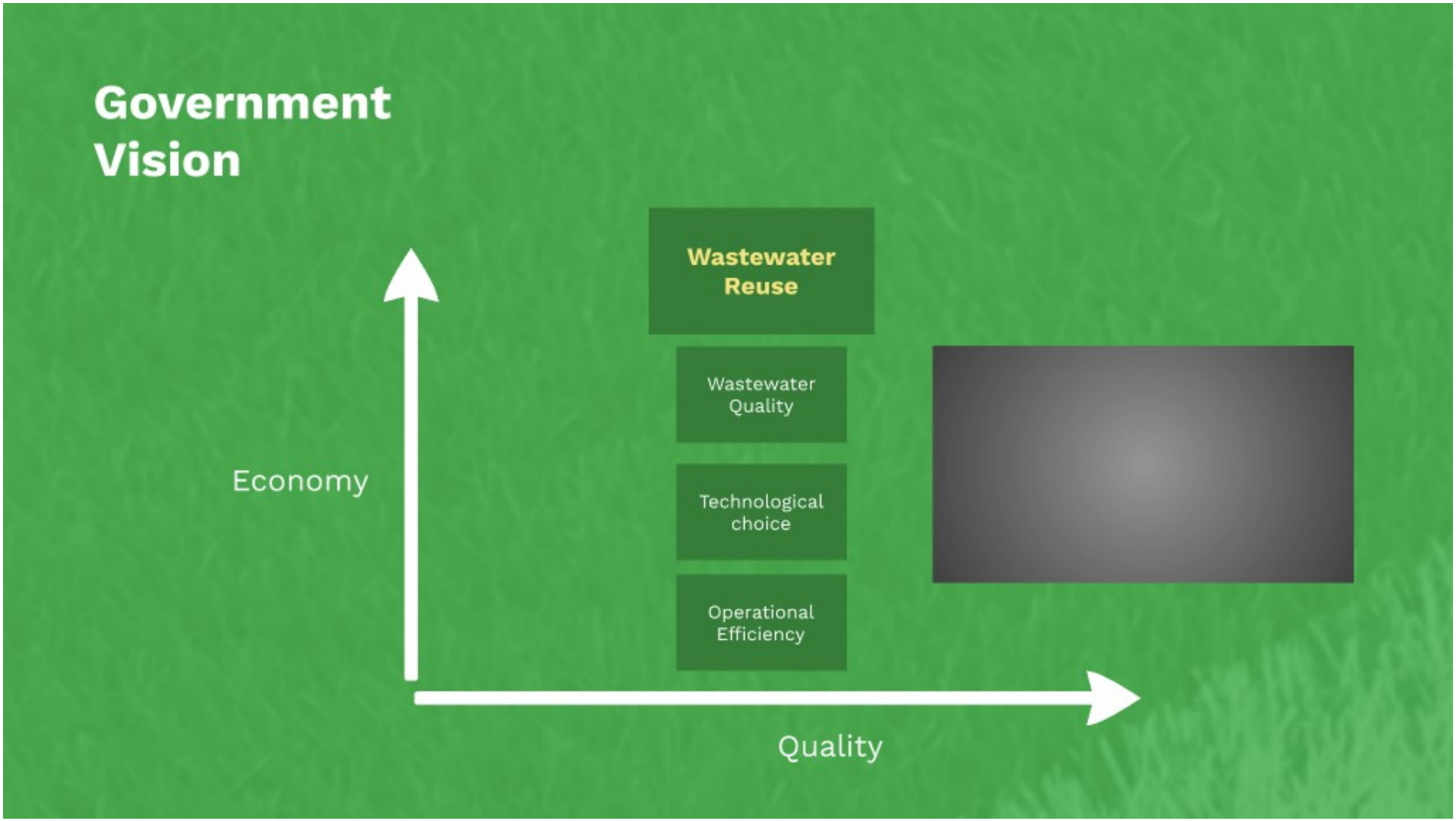

GEORGIA
RUSSIA
Greater Caucasus
Bazar Dyuzi 4466
Caspian Sea
Kura river
AZERBAIJAN
Baku
Kura-Aras Lowland
Lesser Caucasus
ARMENIA
Aras river
IRAN
AZERBAIJAN MAP
physical features

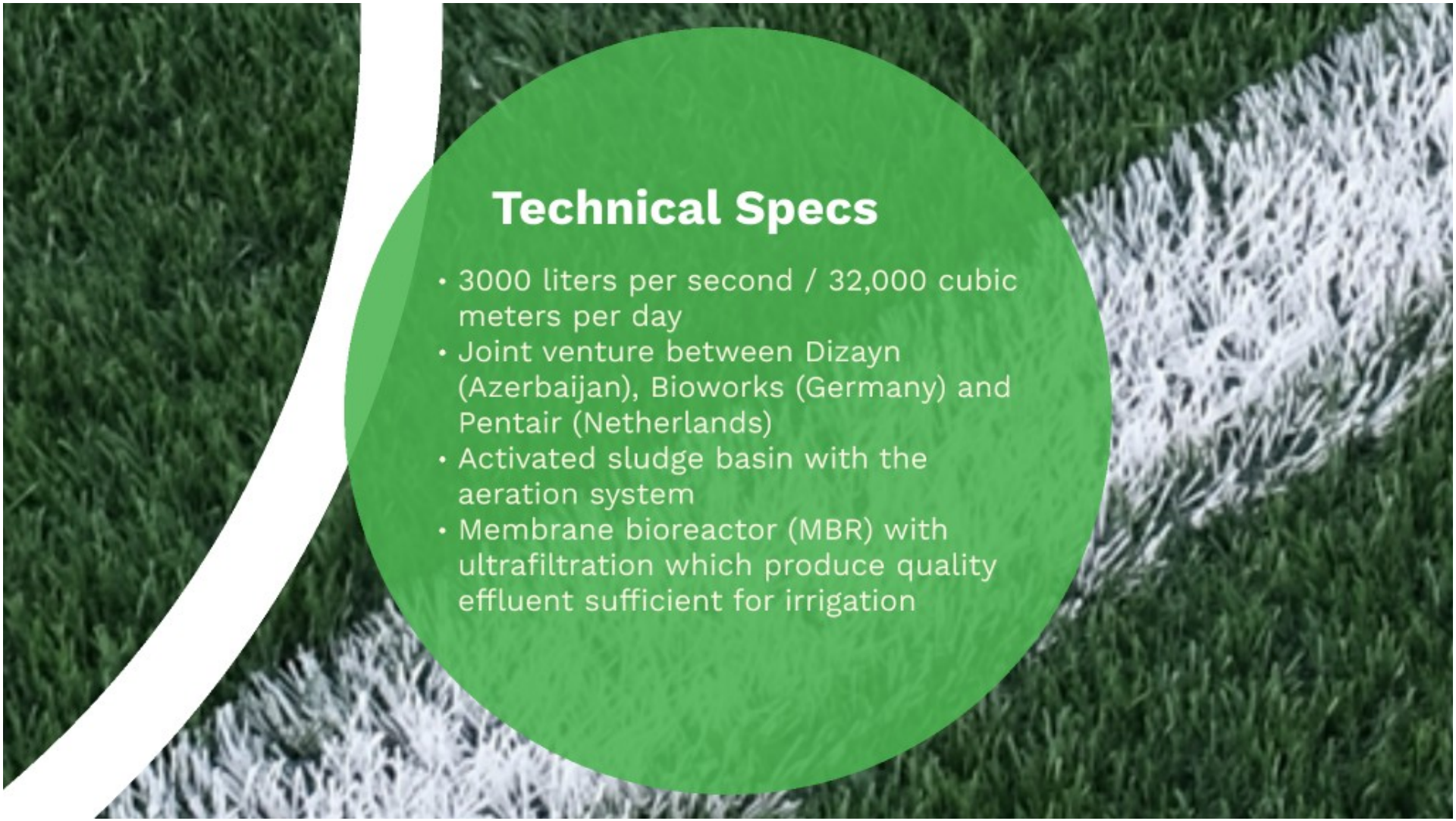

The Setting
Nakhchivan Autonomous Republic
– Population: 400,000
– 5,000 years of recorded urban history
– No land or rail links to greater Azerbaijan
Nakhchivan City:
• Capital of the autonomous republic
• Population: 90,000
• 2 hours of water supply
• No sewerage network

History

– Most households used pit latrines.
– Some households used septic tanks, which often overflowed.
– Some households discharged sewage directly to the roadside channels flowing through town.
– Sewage overflowed onto the streets and public property during rain.
– Blockages and overflows often affected residential areas. 85% of people surveyed during project preparation said they had sewage problems on their property.
– Wastewater from the city was collected and disposed untreated in the Araz River untreated.

Government Vision




Technical Specs
• 3000 liters per second / 32,000 cubic meters per day
• Joint venture between Dizayn (Azerbaijan), Bioworks (Germany) and Pentair (Netherlands)
• Activated sludge basin with the aeration system
• Membrane bioreactor (MBR) with ultrafiltration which produce quality effluent sufficient for irrigation


Government Engagement
• taking the initiative to learn what the future required
• acting decisively and staying committed
• taking equal responsibility for the progress and quality of outcomes
• proactive learning on O&M, and economies of scale through replication


Lessons Learned
• Technology choice is only part of the equation
• Accountability matters
• ADB's role as catalyst