

# ENVIRONMENTAL BENEFITS

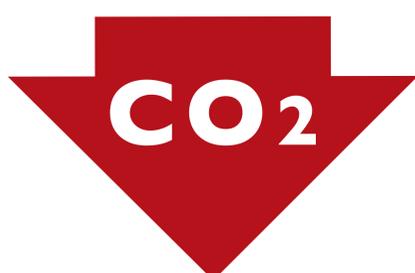
## ROCK ISLAND CLEAN LINE



OVER 4.3 BILLION  
GALLONS OF WATER  
SAVINGS PER YEAR



6,900 TONS OF NITROGEN  
OXIDE REDUCTION PER YEAR  
(NITROGEN OXIDE CONTRIBUTES TO  
SMOG)



10 MILLION TONS OF CARBON  
DIOXIDE REDUCTION PER YEAR  
(EQUAL TO TAKING 1.9 MILLION CARS OFF THE  
ROAD ANNUALLY)



349 POUNDS OF  
MERCURY POLLUTION  
REDUCTION PER YEAR



11,300 TONS OF SULFUR DIOXIDE  
REDUCTION PER YEAR  
(SULFUR DIOXIDE IS A PRECURSOR TO ACID RAIN)



# WHAT IS HIGH VOLTAGE DIRECT CURRENT (HVDC)?

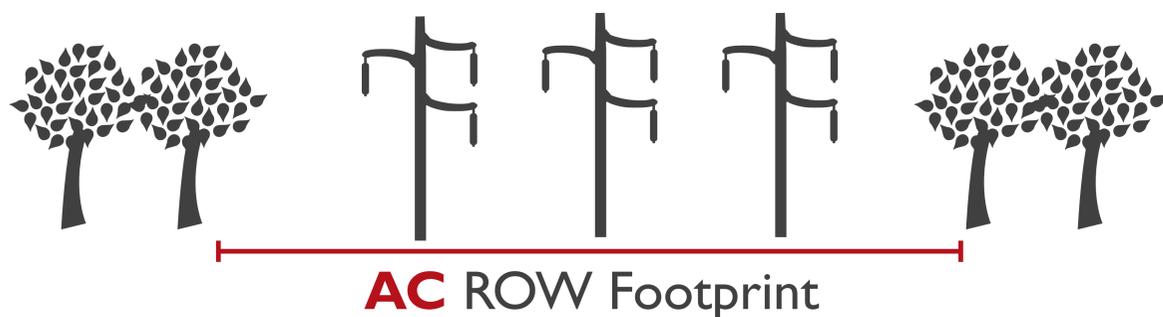
ROCK ISLAND CLEAN LINE

HVDC is the most efficient method to transmit large amounts of electricity over long distances.

## THE BENEFITS OF HVDC TRANSMISSION LINES

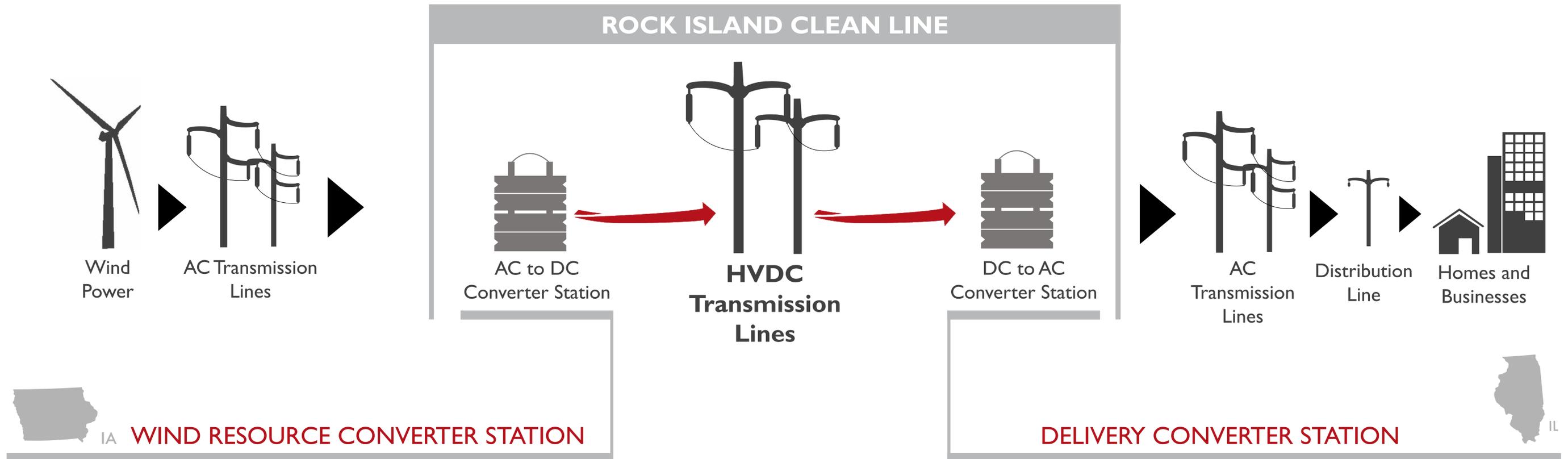
MORE EFFICIENT	Transfer power with less infrastructure and lower line losses than alternating current (AC) lines moving a comparable amount of power over long distances.
LOWER COST	Require less infrastructure and have lower line losses, resulting in lower costs and lower prices for renewable energy.
IMPROVED RELIABILITY	Give the operator complete control over power flow and facilitate the integration of wind energy from different resource areas.
SMALLER FOOTPRINT	Use narrower right-of-way than comparable AC lines.

## RIGHT-OF-WAY (ROW) FOOTPRINT



# DELIVERING RENEWABLE ENERGY WITH HVDC

## ROCK ISLAND CLEAN LINE



- Located in NW Iowa
- Collects wind from Iowa and bordering states
- Converts energy from AC power to DC power
- Energy is transmitted on the Rock Island Clean Line

- Located in NE Illinois
- Energy is received from the Rock Island Clean Line
- Converts energy from DC power to AC power
- Connects with existing transmission system

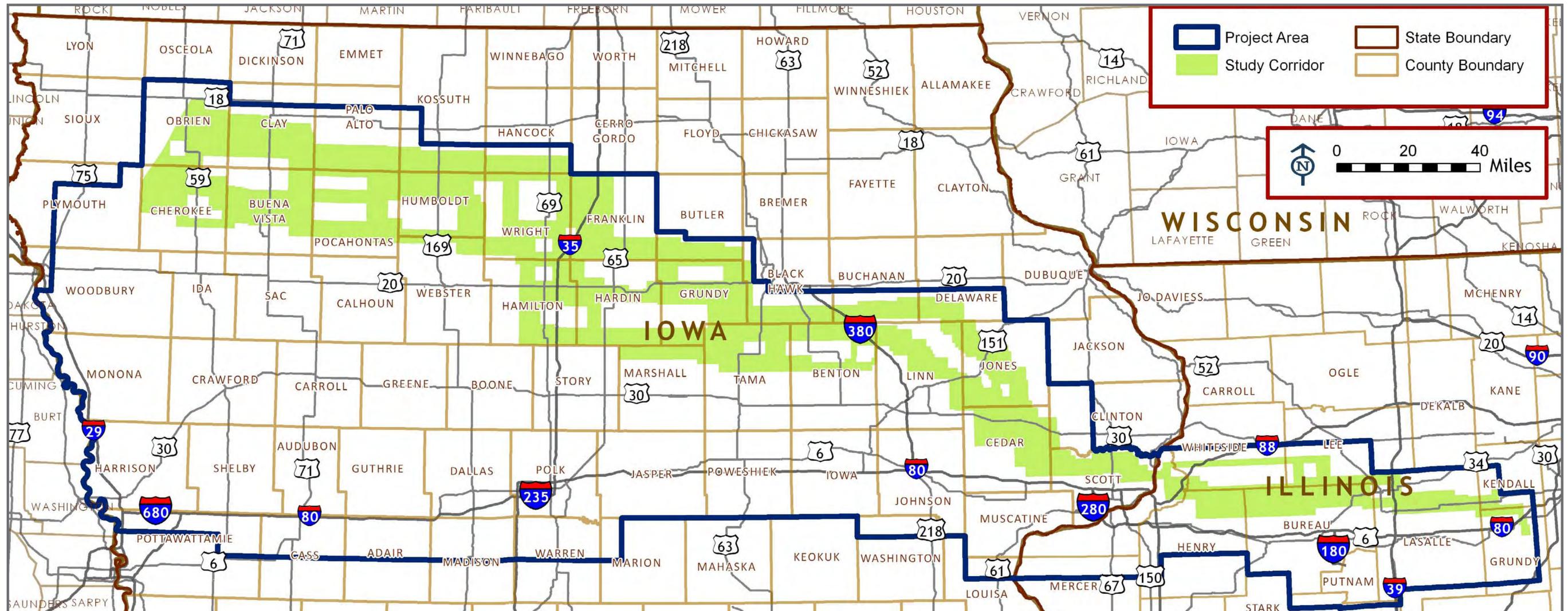


Typical Converter Station: each station will require approximately 65 fenced acres



# ROCK ISLAND CLEAN LINE STUDY CORRIDORS

## ROCK ISLAND CLEAN LINE



### WHAT CRITERIA ARE USED TO DETERMINE A ROUTE?

Clean Line Energy's review of potential routes considers many factors, including:

- Residences
- Agricultural land
- State and federal lands
- Recreational areas
- Water resources
- Known cultural resources
- Sensitive habitats & protected species
- Airports/airstrips
- Schools & churches
- Engineering considerations
- Community feedback
- Government & conservation agency feedback
- Stakeholder feedback
- Legal requirements
- And others

\*As we learn more about the study corridors, other factors may be added.

A study **corridor** is a 3-to-10-mile wide study area being considered to determine a route.

A **route** is the specific path along which the Rock Island Clean Line will be constructed.

