



energy & climate

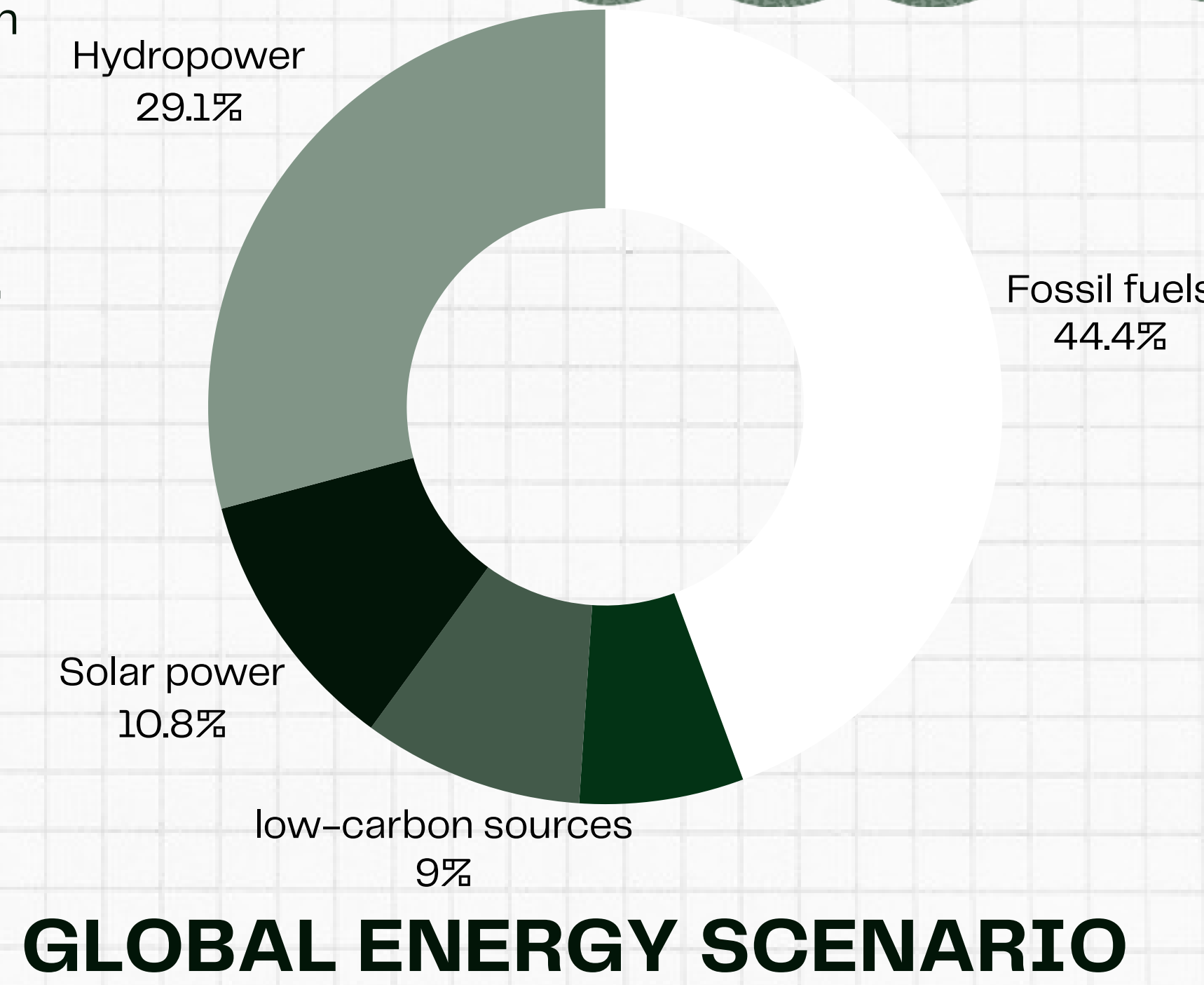
DIVERSIFYING ENERGY PORTFOLIOS IN THE FACE OF NET-ZERO TARGETS: CHALLENGES AND OPPORTUNITIES FOR THE OIL AND GAS INDUSTRY

The global climate crisis necessitates a shift towards sustainable energy sources, with net-zero targets adopted by corporations and governments. The oil and gas industry faces challenges in diversifying energy portfolios, but offers opportunities. The presentation analyzes global energy scenarios, presents innovative business models, financial projections, and evaluates the impact on communities and the planet.

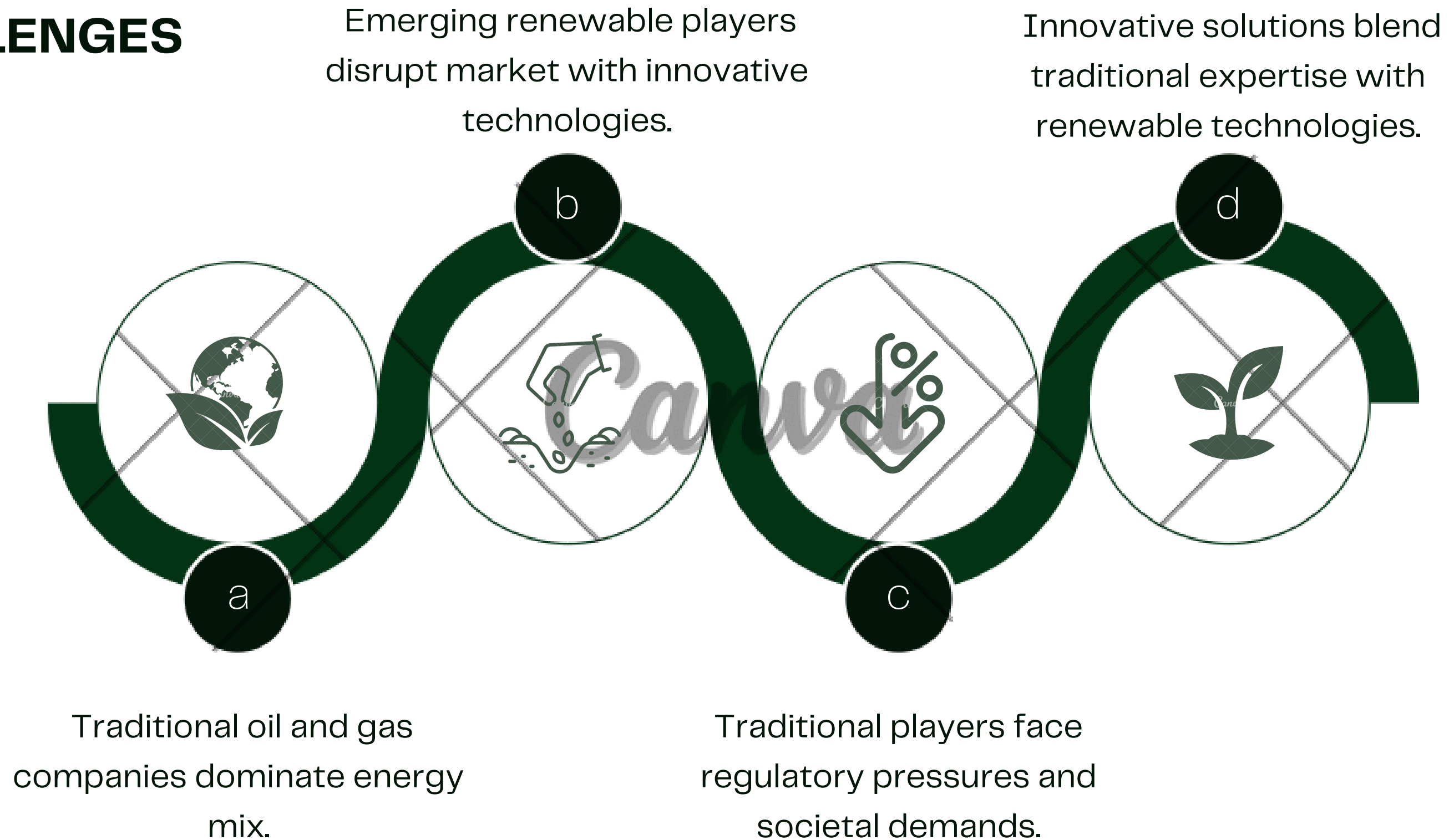


Shift Towards Renewables: Challenges and Opportunities

- Scalability: Renewable technologies like wind and solar power face limitations. Innovation in energy storage and grid integration is crucial.
- Capital Transition: Transitioning from fossil fuels to renewable systems is expensive and requires financing from governments, private investors, and traditional energy companies.
- Regulatory Roulette: The regulatory landscape is evolving, requiring collaboration between governments, industry players, and stakeholders.
- Renewable Integration: Innovation in smart grids and demand response is needed.



ENERGY MIX CHALLENGES



NAVIGATING THE ROAD TO NET-ZERO

CONTENT:

Technological
Evolution:

- Promising renewable technology but limitations.
- Innovation needed in scalability, energy storage, and efficiency.
- Mitigation strategies include research, collaboration, and adoption of new technologies.

Capital Transition:

- Expensive transition from fossil fuels to renewable systems.
- Mitigation strategies include partnerships, innovative financing, and capital allocation optimization.

Regulatory Roulette:

- Changing regulatory landscape with different approaches.
- Mitigation strategies include policy advocacy, international forums, and adapting business models.

Renewable
Integration:

- Complexity of integrating renewable energy solutions.
- Mitigation strategies include collaboration, smart grid technology investment, and flexible business models.

Market Dynamics:

- Competition from new entrants in the renewable sector.
- Mitigation strategies include innovation, strategic partnerships, and new business models.

STRATEGIC ANALYSIS AND RECOMMENDATIONS IN THE RENEWABLE ENERGY MARKET

Key Trends and
Opportunities:



Traditional energy storage methods include batteries, pumped hydro storage, and flywheels, while green hydrogen is a clean fuel option, while the circular economy promotes sustainability.

Potential Strategic
Partnerships and
Collaborations:



Traditional players can partner with emerging renewable companies for technology development, acquisitions, and strategic alliances, collaborating to share resources and knowledge.

Recommendations
for Reinvention:



Embrace Renewables:
Traditional players should invest in renewable technologies and projects.

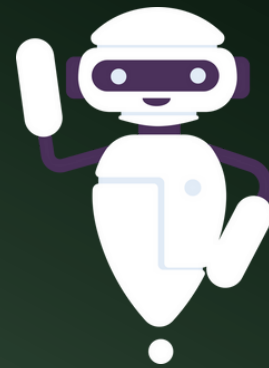
Diversify Portfolios:
Traditional players should diversify their portfolios to include renewable assets.

Traditional vs. emerging
renewables.



Traditional players should collaborate with emerging renewable players to leverage their expertise and invest in research and development to develop more efficient, cost-effective, and sustainable technologies.

INNOVATIVE BUSINESS MODELS FOR A NET-ZERO FUTURE



Carbon Capture and Storage (CCS)

CCS Technology Overview

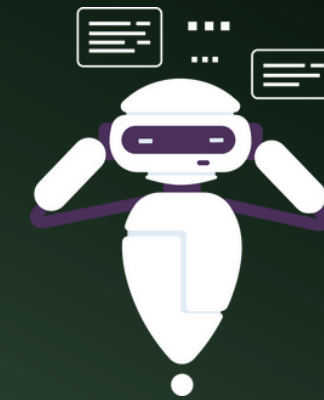
- Captures CO2 emissions from power plants and industrial facilities.
- Utilizes drilling, pipeline transportation, and storage expertise.
- Revenue streams: charging fees, selling CO2.
- Challenges: high capital expenditure, technical complexities, regulatory hurdles.



Renewable Power Generation

Renewable Energy Investment Overview

- Investing in wind farms, solar parks, hydropower plants.
- Offering energy storage solutions.
- Revenue streams: electricity sales, energy management services, maintenance support.
- Challenges: competition, renewable source variability, infrastructure integration.



Circular Economy Solutions

Oil and Gas Circular Economy Business Models

- Focus on waste reduction, recycling, and product repurposing.
- Services include converting plastics into feedstocks or biofuels.
- Revenue streams: charging fees, selling recycled materials, reducing costs.
- Challenges: technical feasibility, regulatory frameworks, competition.

TRANSITIONING TO NET-ZERO BUSINESS MODEL

- Exploring financial implications of sustainable energy investments.
- Emphasizing technological innovation in renewable technologies.
- Capital Transition Planning for cost management and investment security.
- Navigating global renewable regulations and identifying financial opportunities.
- Addressing integration complexities in existing systems.
- Analyzing competitive financial strategies in renewable sector.
- Risk Mitigation Planning for financial risks.