Industrial Solar PV Adoption 2026: Opportunities, Barriers & Outlook

Sep 2026



RESEARCH OBJECTIVE

THE FINDINGS OF THIS SURVEY INDICATE THE FOLLOWING:



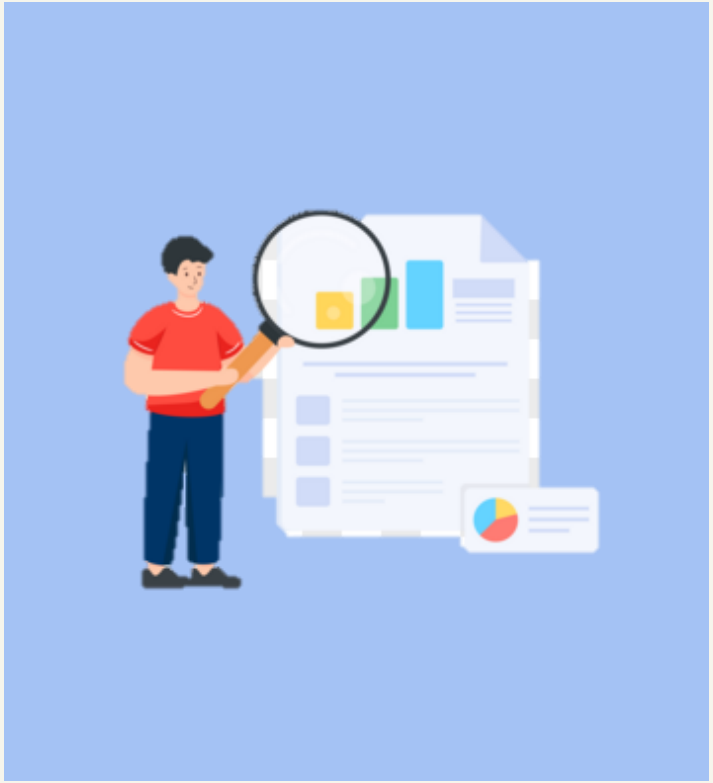
Assess Solar PV Adoption, Drivers & Challenges: Understand the current state of Solar PV adoption, including capacity, utilization, and BESS, while identifying key adoption drivers, benefits, satisfaction levels, and operational challenges.

Identify Barriers & Future Adoption Potential: Barriers among non-users and factors that could trigger adoption.

Evaluate Policy Support & Solar PV Outlook: Assess industry perceptions of policy and regulatory support, expected growth, expansion plans, and key factors driving future Solar PV adoption.

Petromindo SURVEY

SURVEY METHOD & SAMPLING



Sample Size

(Call us to know more details)

Date of Survey	24 August – 13 September 2026
Survey Method	Quantitative – Online questionnaire with non-probability, Purposive Sampling
Population	Industrial companies operating in Indonesia, including mining, oil & gas, power & electricity, manufacturing, and other energy-intensive industries.
Respondent Criteria	• Works for a company operating in Indonesia • Works in a function related to energy, electricity, operations, sustainability • Has knowledge of or involvement in the company's electricity/energy management • Both Solar PV users and non-users are eligible

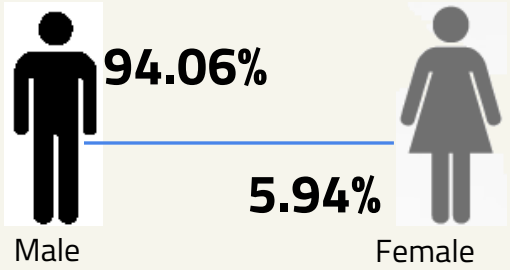
RESPONDENT PROFILE

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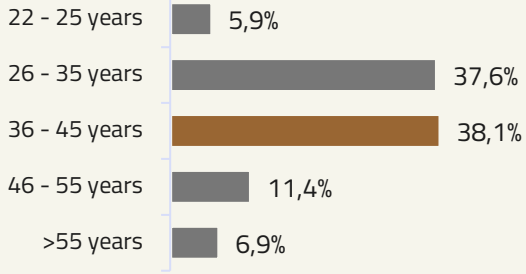
Overall, the majority of respondents are male, aged 36–45, and primarily work in Engineering/Technical roles within the mining sector (mining owners/contractors). Most respondents are from companies that have not yet adopted Solar PV.

(Base: All respondent, n=)

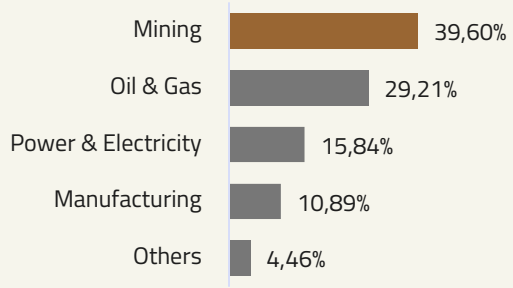
GENDER



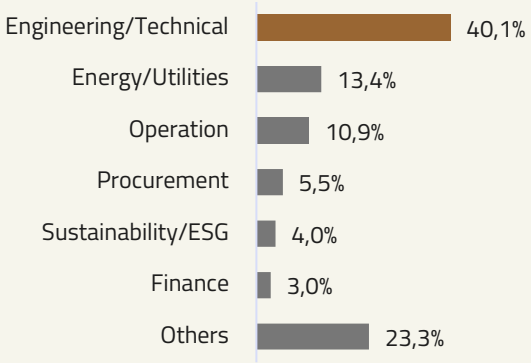
AGE



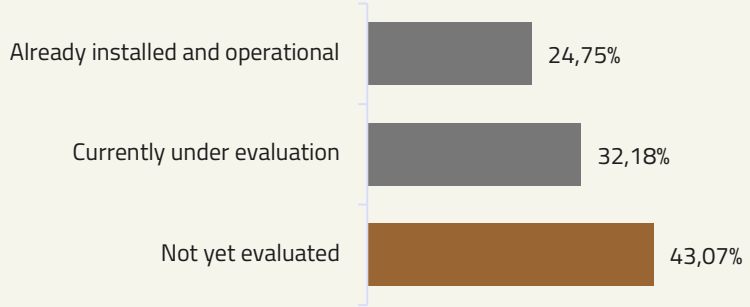
INSTITUTION OF ORIGIN



DEPARTMENT/FUNCTION



What is the current status of Solar PV adoption at your company?





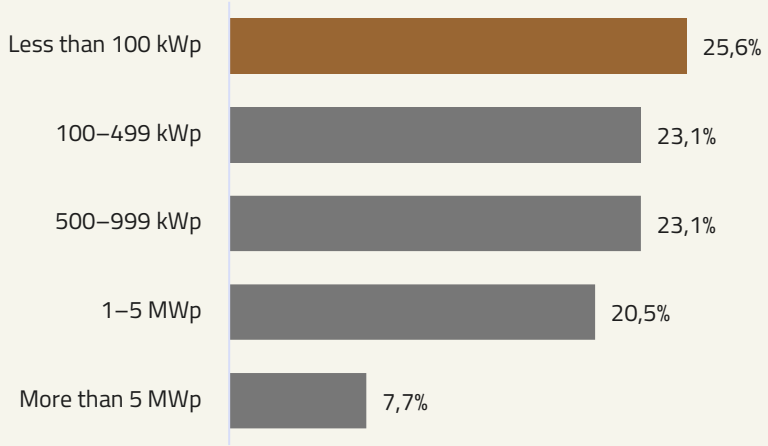
Assess Solar PV Adoption, Drivers & Challenges: Understand the current state of Solar PV adoption, including capacity, utilization, and BESS, while identifying key adoption drivers, benefits, satisfaction levels, and operational challenges

(Base: Companies with installed and operational Solar PV systems, n=)

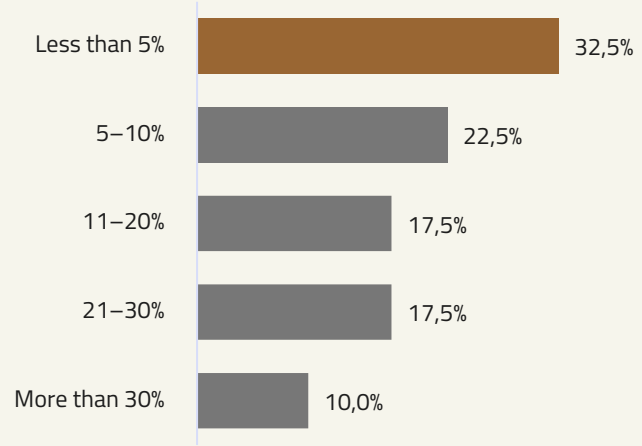
The majority of installed Solar PV systems have relatively small capacities of less than 100 kWp, while Solar PV currently covers less than 5% of companies' total energy needs

Only 7.7% of respondents reported that their companies have installed Solar PV systems with a capacity of more than 5 MWp

What is the total Solar PV capacity currently installed at your company? [SA]
(Base: Companies with installed and operational Solar PV systems, n=)

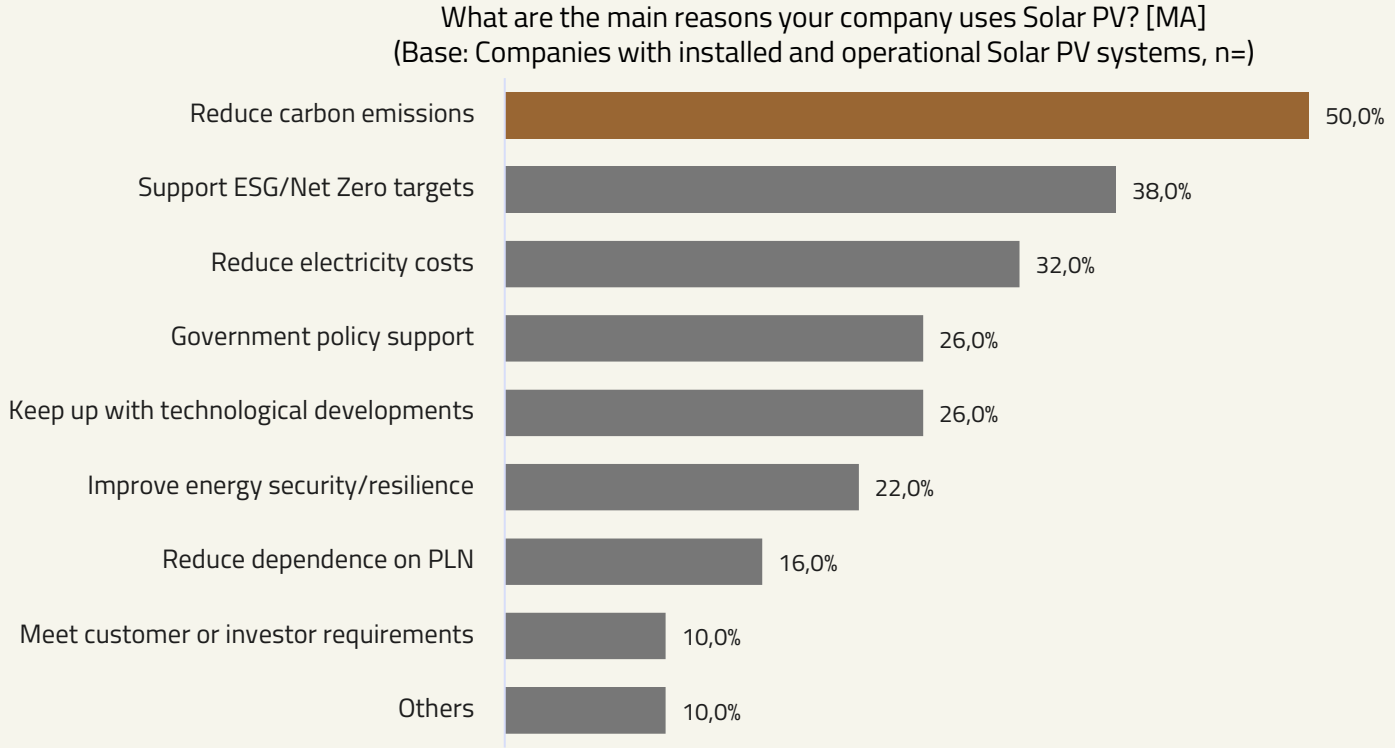


Share of Energy Needs Met by Solar PV (%)[SA]
(Base: Companies with installed and operational Solar PV systems, n=)



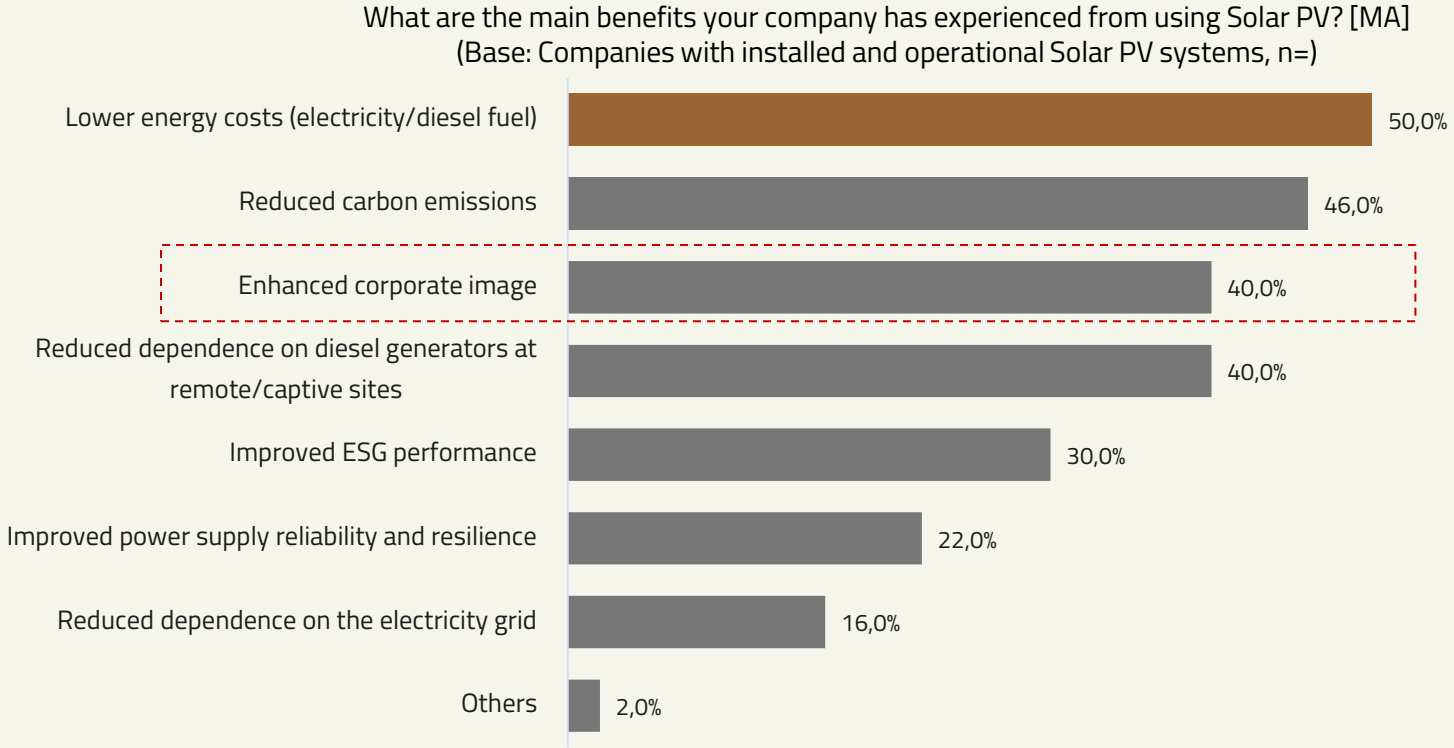
Reducing carbon emissions and supporting ESG/Net Zero targets are among the key reasons companies adopt Solar PV

In addition to environmental and ESG considerations, reducing electricity costs remains a strong driver of Solar PV adoption among companies.



Beyond lower energy costs and reduced carbon emissions, enhanced corporate image is also perceived as a key benefit of Solar PV adoption

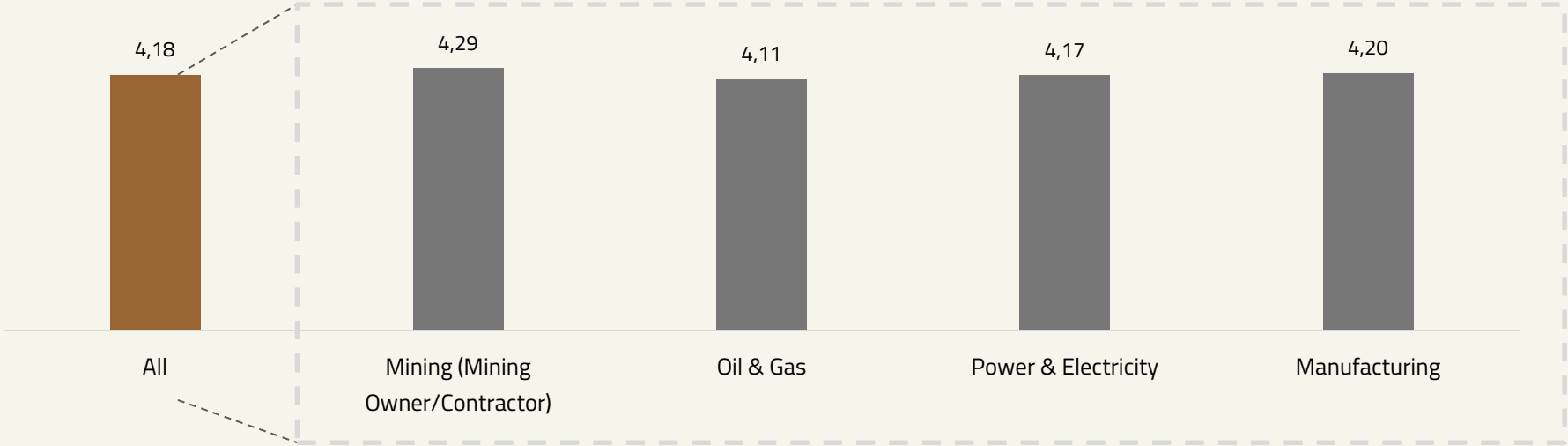
Each of these benefits was cited by more than 40% of respondents.



Overall, the majority of respondents are satisfied with the performance of their companies' existing Solar PV systems

with an average score of 4.19, indicating a high level of satisfaction.

On a scale of 1 to 5, In your opinion, Overall, how satisfied is your company with the performance of its Solar PV system? [SA]
(Base: Companies with installed and operational Solar PV systems, n=)



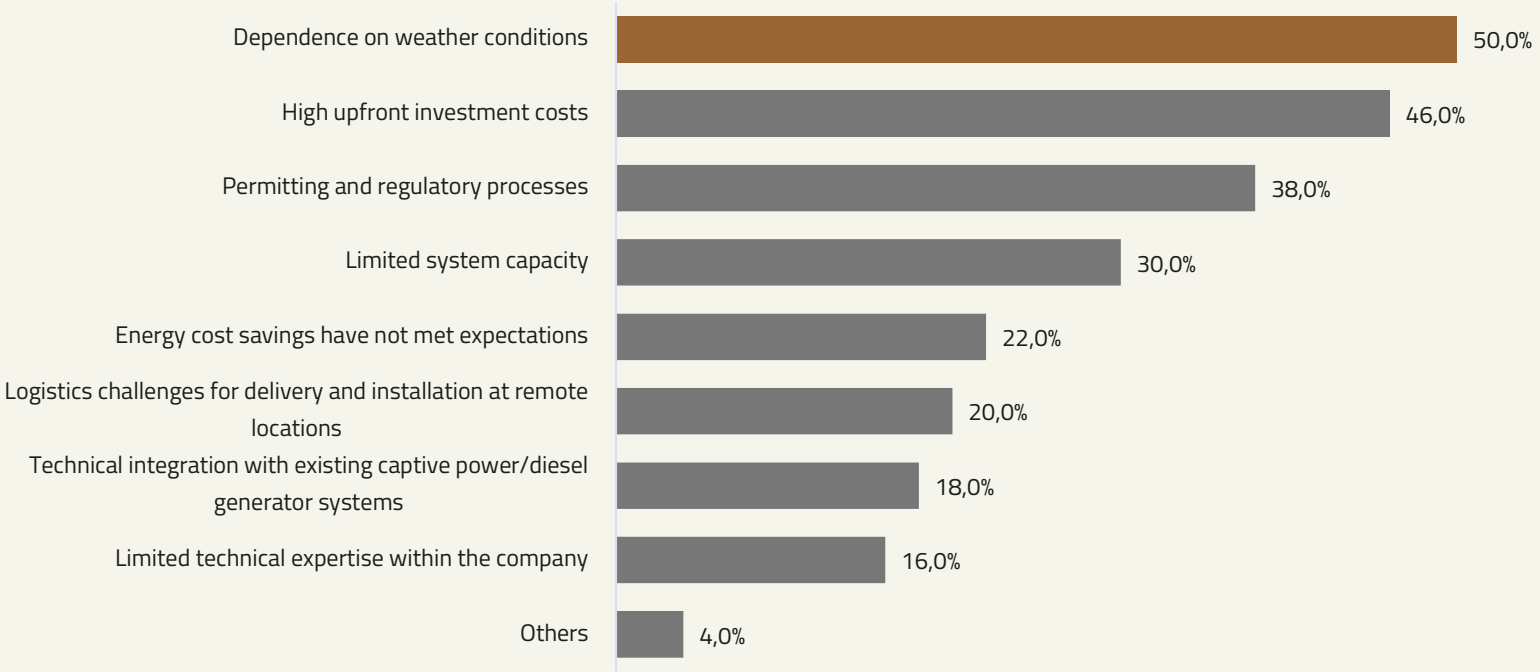
Remark :

1: Very dissatisfied 2: Dissatisfied 3: Neither satisfied nor dissatisfied 4: Satisfied 5: Very satisfied

Dependence on weather conditions (50%) remains the main challenge in using Solar PV, as fluctuations in solar irradiation can affect power generation and system output

High upfront investment costs also remain a key challenge, particularly given the significant capital required for Solar PV installation and supporting infrastructure.

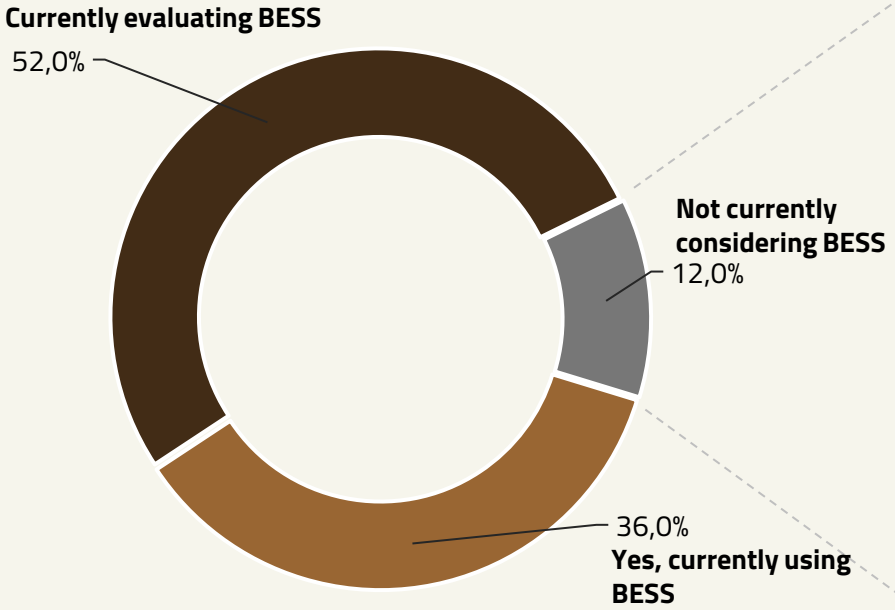
What are the main challenges your company faces in using Solar PV? [MA]
(Base: Companies with installed and operational Solar PV systems, n=)



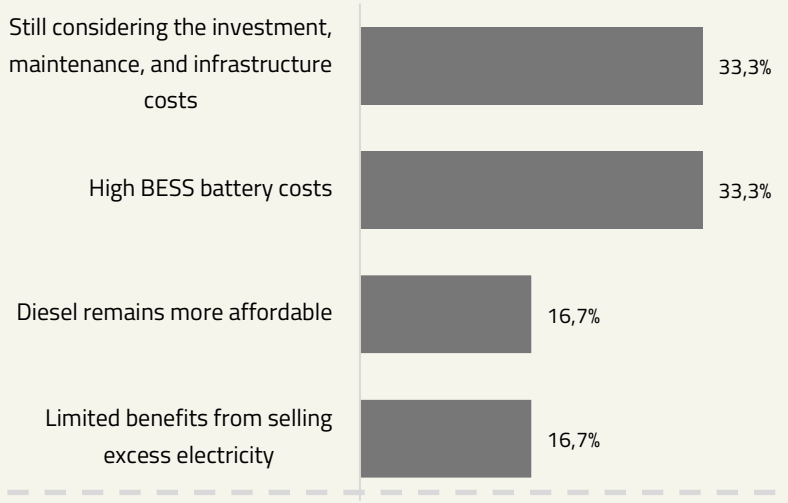
Only 36% of respondents' companies currently use BESS, while 52% are still evaluating its adoption and 12% are not yet interested

The main reasons for hesitancy are concerns over investment, maintenance, and infrastructure costs, as well as the high cost of BESS batteries.

Does your company currently use a Battery Energy Storage System (BESS) together with Solar PV? [SA]
(Base: Companies with installed and operational Solar PV systems, n=)



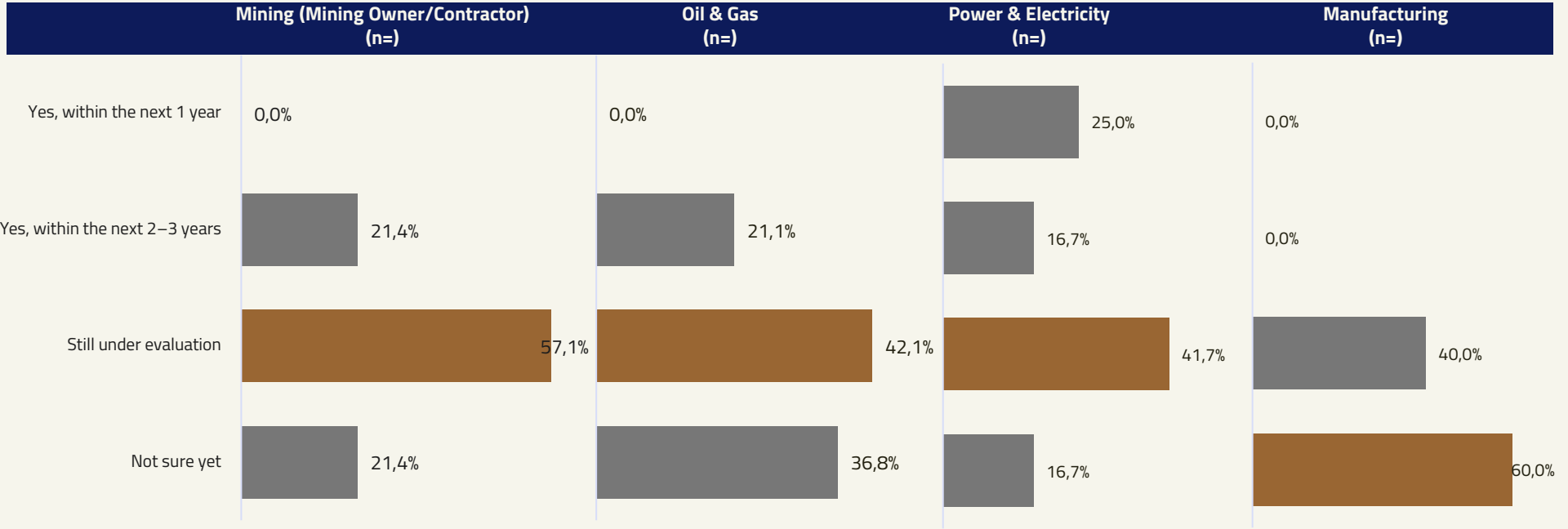
What are the main reasons your company is not currently considering BESS?
(n=)



The majority of companies are still evaluating plans to increase their Solar PV capacity, as key concerns remain around investment costs, system performance, and operational readiness

This suggests that further expansion will depend on stronger economic justification and greater confidence in system performance.

Does your company plan to increase its Solar PV capacity? [SA]
(Base: Companies with installed and operational Solar PV systems, n=)





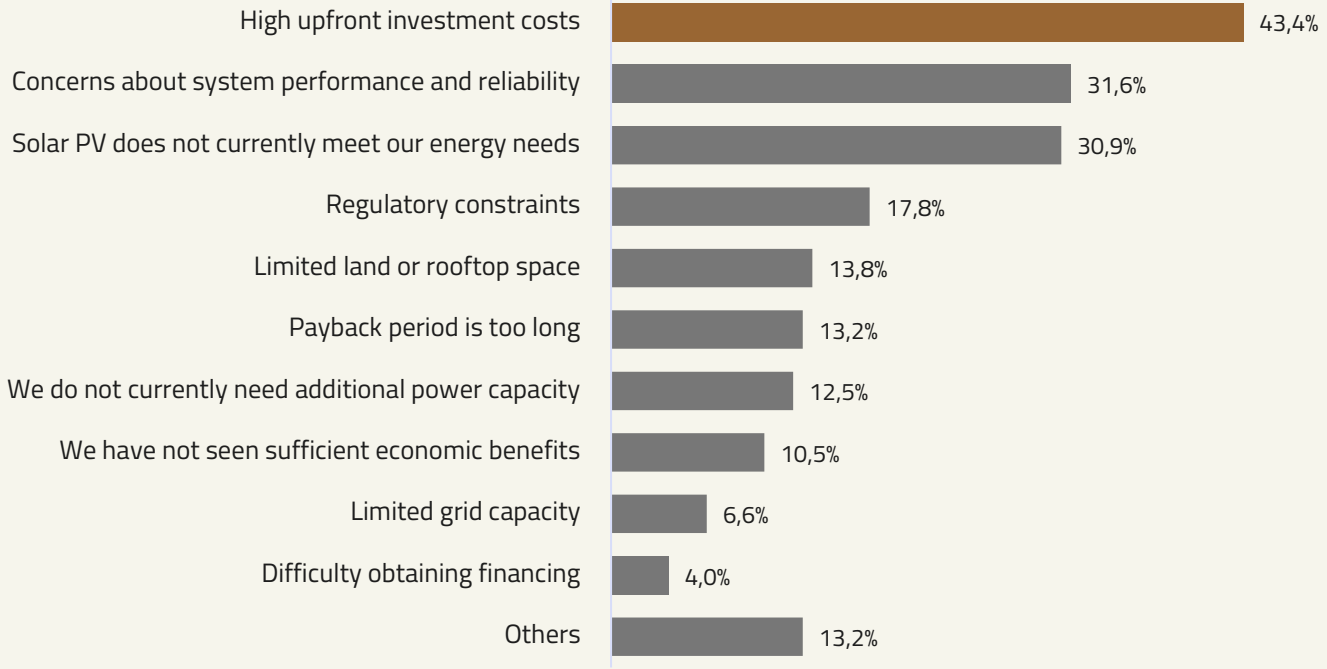
Identify Barriers & Future Adoption Potential:
Barriers among non-users and factors that could trigger adoption.

(Base: Companies that have not yet adopted Solar PV, n=)

High upfront investment costs remain the biggest challenge to Solar PV adoption, cited by 43.4% of respondents

Concerns about system performance and reliability (31.6%) also remain a key barrier to Solar PV adoption, as companies remain cautious about whether the system can consistently meet their energy needs and deliver the expected performance.

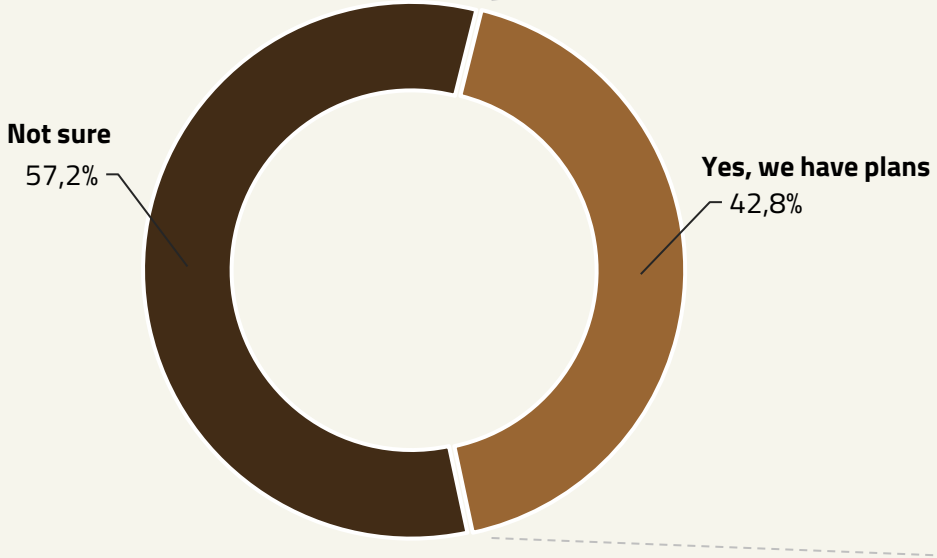
What are the main reasons your company is not currently interested in adopting Solar PV? [MA]
(Base: Companies that **have not yet** adopted Solar PV, n=)



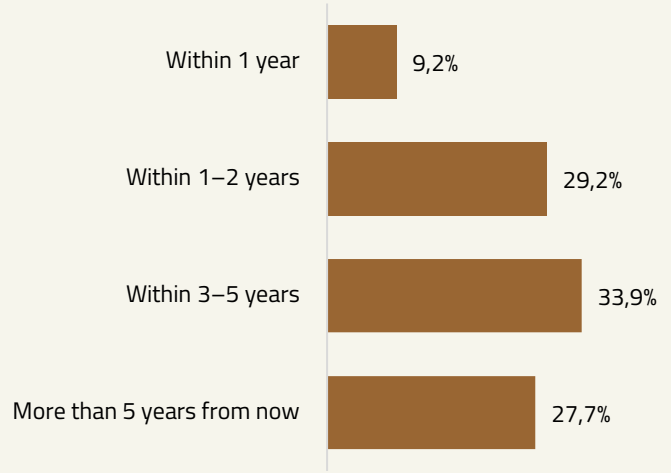
Among companies that have not yet adopted Solar PV, only 42.8% have plans to adopt it in the future, while the remaining 57.2% have no plans at yet

Most planned Solar PV adoption is expected to take place over the medium term, within 3–5 years, as reported by 33.9% of respondents.

Does your company have any plans to adopt Solar PV? [SA]
(Base: Companies that **have not yet** adopted Solar PV, n=)



When do you expect your company's Solar PV adoption plans to be implemented? [SA]
(Base: Companies **currently evaluating** Solar PV adoption, n=)

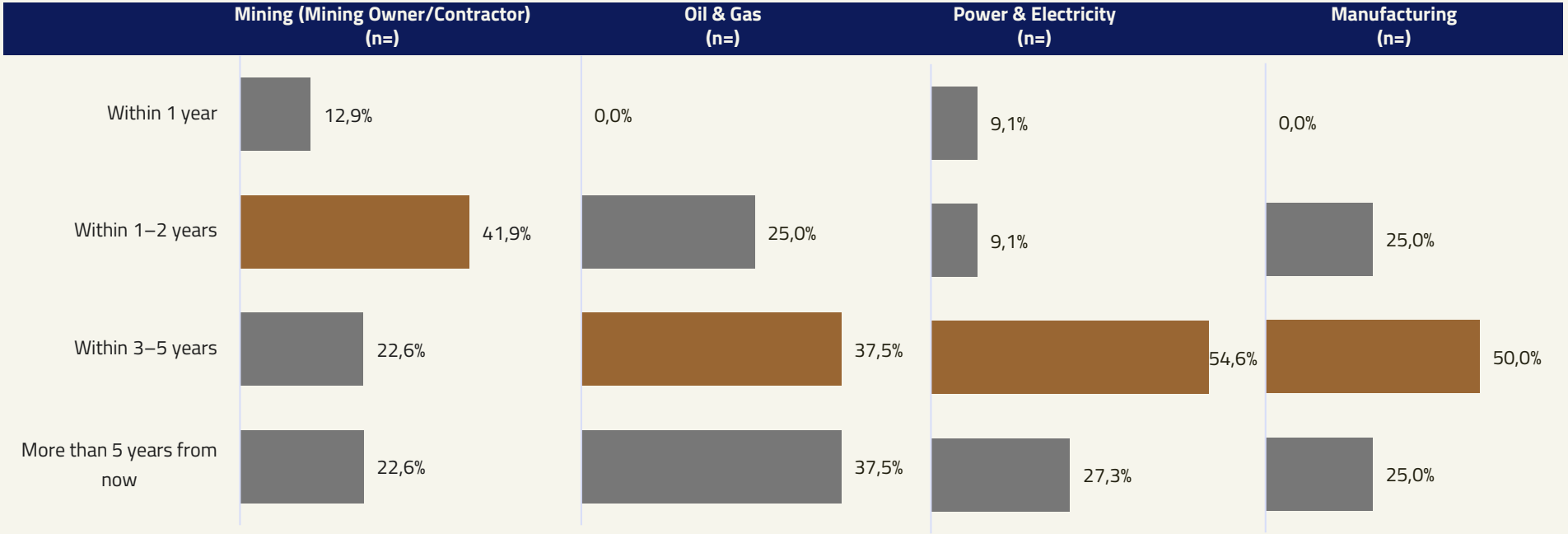


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Most industries plan to adopt Solar PV within the medium term (3–5 years),

while the mining sector is more likely to implement it in the short term (1–2 years), as reported by 41.9% of respondents

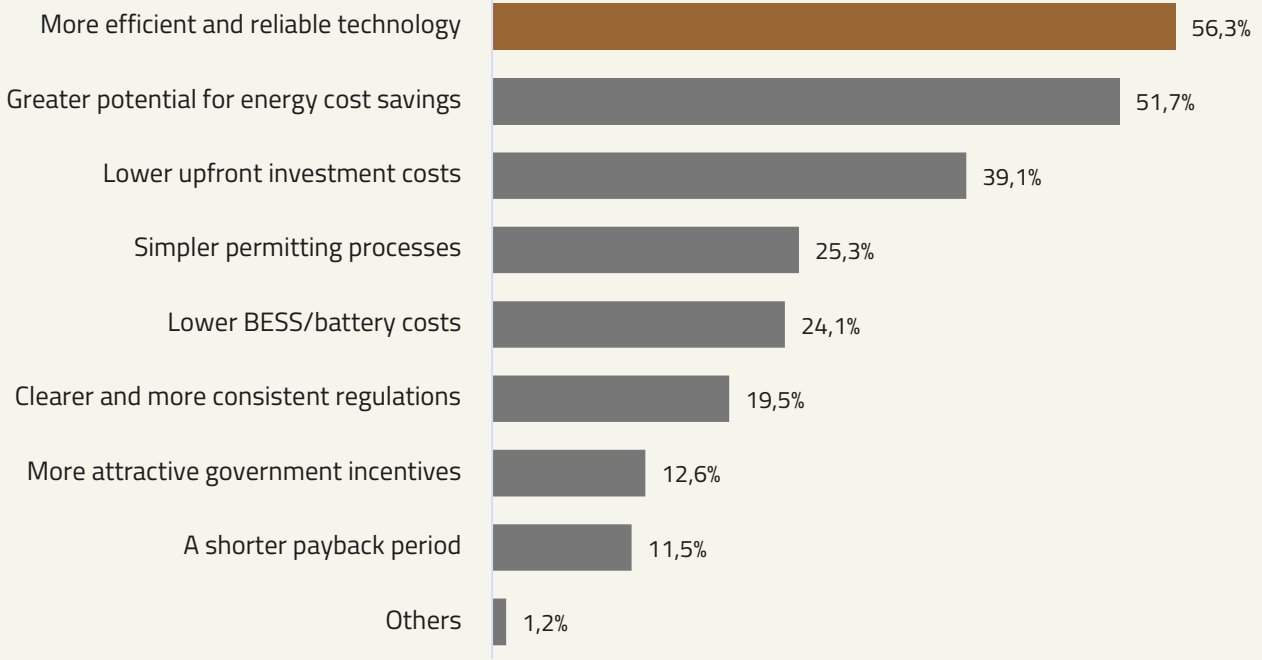
When do you expect your company's Solar PV adoption plans to be implemented? [SA]
(Base: Companies **currently evaluating** Solar PV adoption, n=)



More efficient and reliable technology (56.3%) and greater energy cost savings (51.7%) are the key factors that could increase interest in Solar PV among non-adopters,

highlighting the importance of stronger system performance and clearer economic benefits in driving adoption.

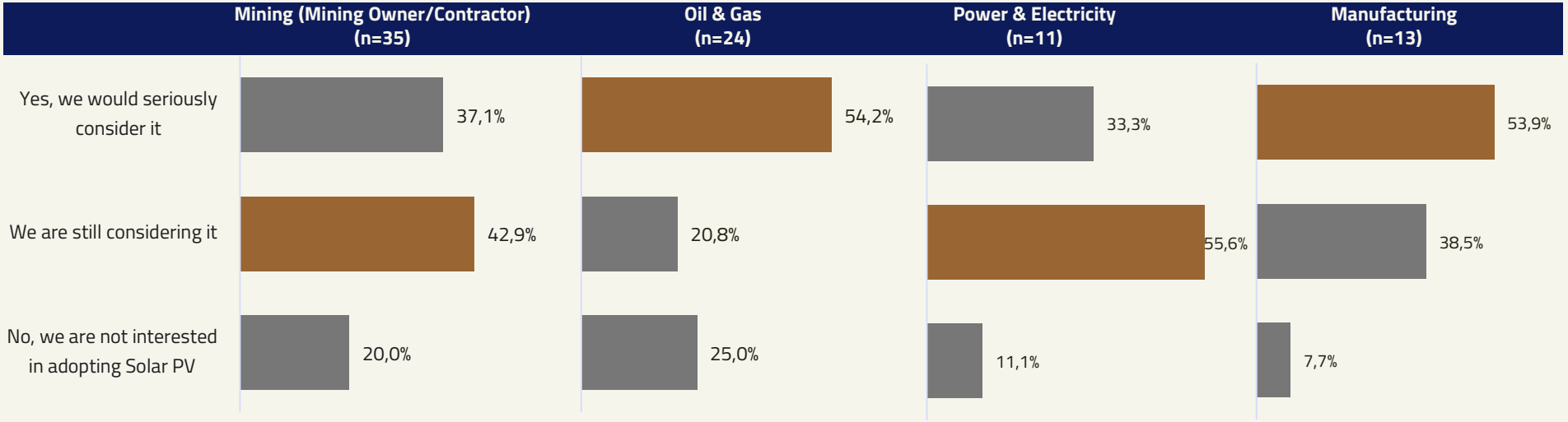
What factors would most likely increase your company's interest in adopting Solar PV? [MA]
(Base: Companies that **have not yet evaluated** Solar PV adoption, n=)



Even if the expected conditions are met, some industries remain hesitant and are still not interested in adopting Solar PV

oil & gas and manufacturing sectors show the strongest interest in Solar PV, at 54.2% and 53.9%, respectively.

If these conditions were met, would your company consider adopting Solar PV? [SA]
(Base: Companies that **have not yet evaluated** Solar PV adoption, n=87)





Evaluate Policy Support & Solar PV Outlook:
Assess industry perceptions of policy and regulatory support, expected growth, expansion plans, and key factors driving future Solar PV adoption

(Base: All respondents, n=)

Overall, respondents consider current government policies supportive of Solar PV development in the industrial sector, with an average score of 3.89 out of 5.

Companies that have not yet evaluated or are not interested in Solar PV gave the lowest score, at 3.67 out of 5.

On a scale of 1 to 5, Overall, how supportive are current government policies toward Solar PV development in the industrial sector? [SA]
(Base: All respondents, n=)



Remark :

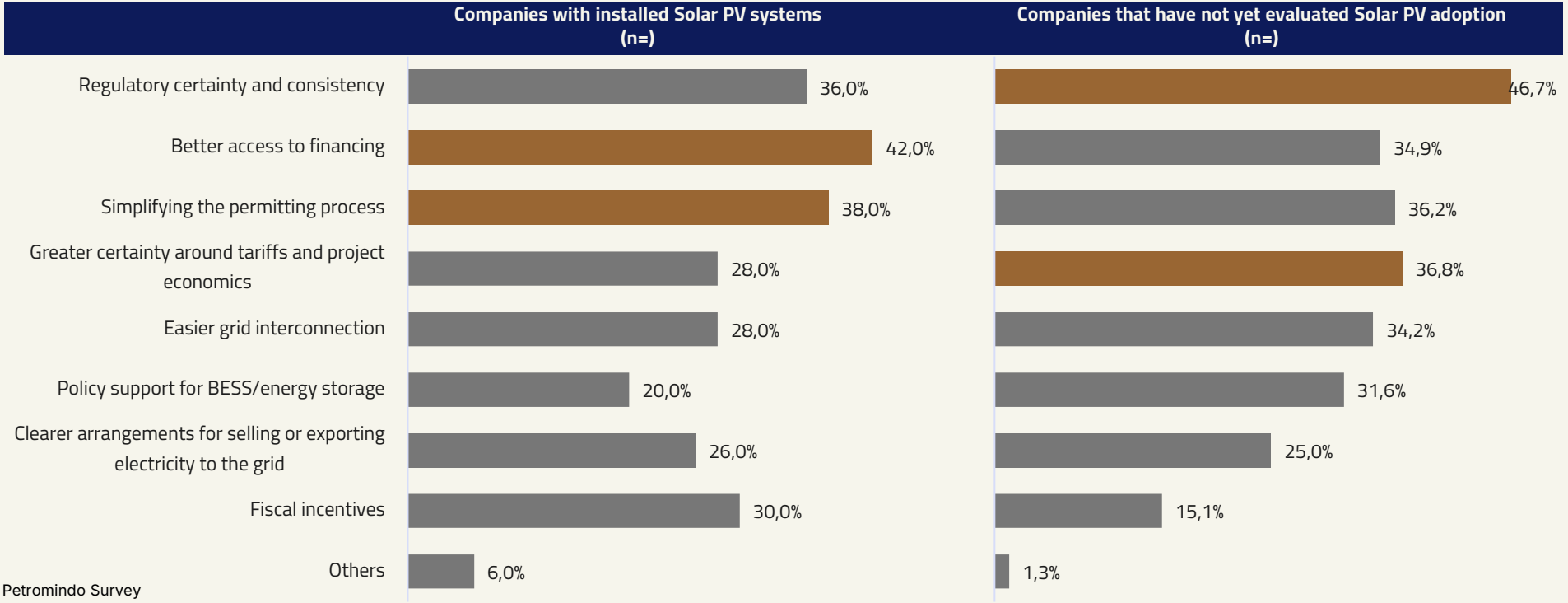
1: Not at all supportive 2: Not supportive 3: Neither supportive nor unsupportive 4: Supportive 5: Very supportive

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Solar PV users prioritize better access to financing and simpler permitting, while non-adopters prioritize regulatory certainty and consistency and greater tariff and project economic certainty

This reflects different needs: existing users focus on facilitating project implementation, while non-adopters seek greater certainty before making investment decisions

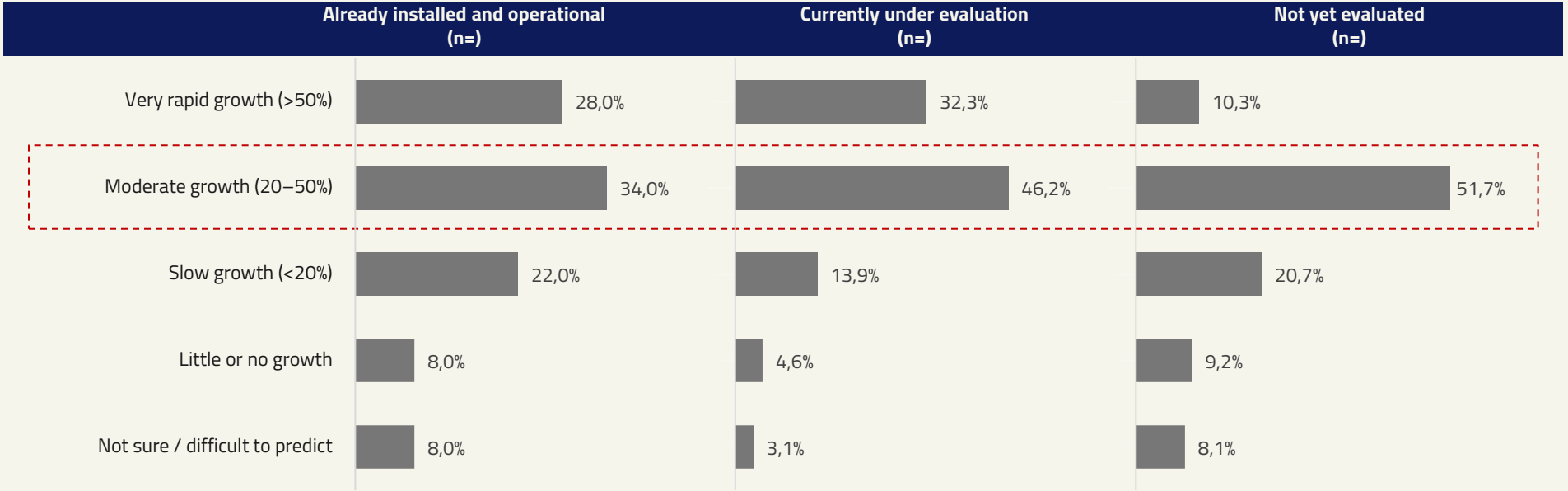
In your opinion, Which policy areas should be improved most to accelerate Solar PV adoption in the industrial sector? [MA]
(Base: All respondents, n=)



Nearly all industries expect Solar PV adoption in the industrial sector to grow moderately by 20–50% over the next 3–5 years

This view is shared by both Solar PV users and non-adopters, indicating broad expectations of continued growth in industrial Solar PV adoption despite differences in current adoption status.

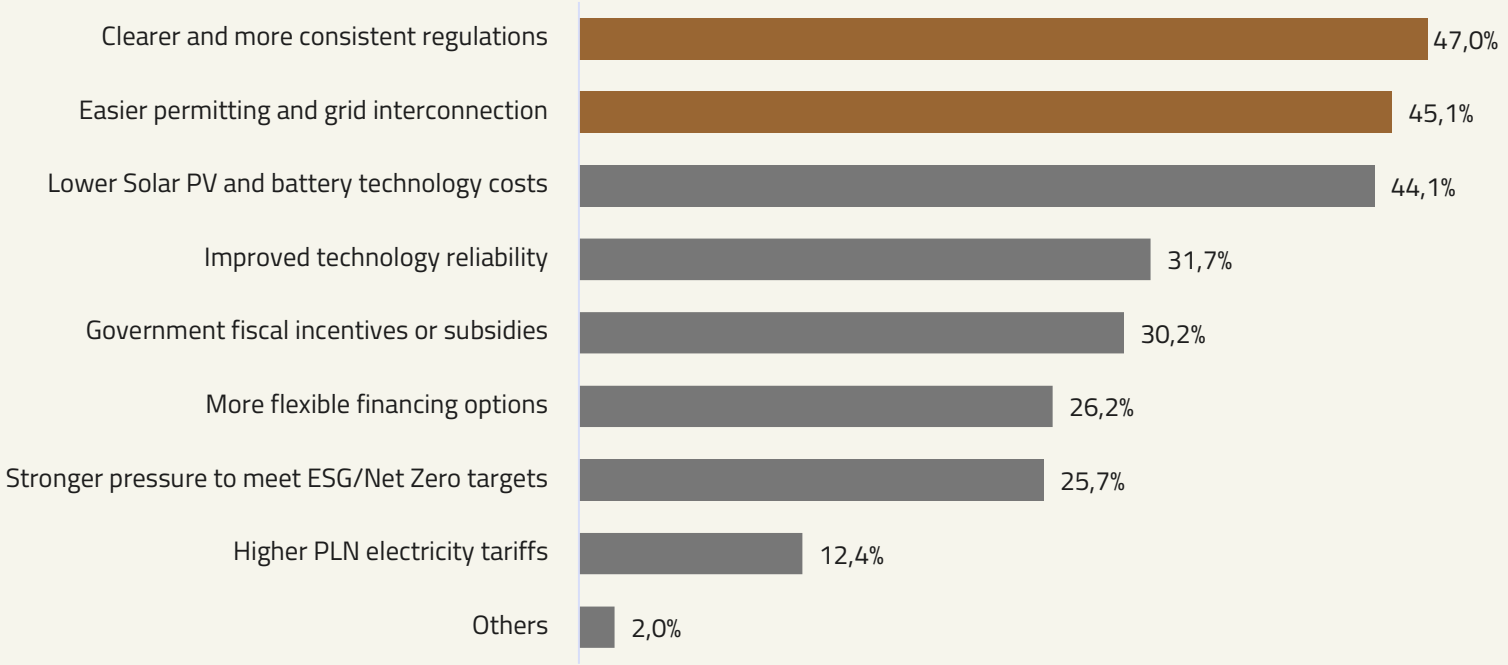
How do you expect Solar PV adoption in Indonesia's industrial sector to develop over the next 3–5 years? [SA]
(Base: All Respondents, n=)



Key factors needed to accelerate industrial Solar PV adoption include clearer and more consistent regulations (47%) and lower Solar PV and battery technology costs (45.1%)

as these could reduce investment risks and improve project economics.

In your opinion, what factors are most important for accelerating Solar PV adoption in the industrial sector? [MA]
(Base: All respondents, n=)



KEY INSIGHT

Assess Solar PV Adoption, Drivers & Challenges

(Base: Companies with installed and operational Solar PV systems)

- The majority of installed Solar PV systems have relatively small capacities of less than 100 kWp, while Solar PV currently covers less than 5% of companies' total energy needs. Only 7.7% of respondents reported that their companies have installed Solar PV systems with a capacity of more than 5 MWp
- Beyond lower energy costs and reduced carbon emissions, enhanced corporate image is also seen as a key benefit of Solar PV adoption, cited by 40% of respondents. Meanwhile, dependence on weather conditions remains the main challenge, cited by 50%, as fluctuations in solar irradiation can affect power generation and system output.
- BESS remains relatively costly, with only 36% of respondents' companies currently using it, while 52% are still evaluating adoption and 12% are not yet interested.

Identify Barriers & Future Adoption Potential

(Base: Companies that have not yet adopted Solar PV)

- High upfront investment costs remain the biggest challenge to Solar PV adoption, cited by 43.4% of respondents. As a result, only 42.8% of non-adopters have plans to adopt Solar PV, while the remaining 57.2% have no plans at this stage.
- More efficient and reliable technology (56.3%) and greater energy cost savings (51.7%) are the key factors that could increase interest in Solar PV among non-adopters.

Evaluate Policy Support & Solar PV Outlook

(Base: All respondents)

- Overall, respondents view current government policies as supportive of Solar PV development in the industrial sector, with an average score of 3.89 out of 5. However, companies that have not yet evaluated or are not interested in Solar PV gave a lower score of 3.67.
- Solar PV users prioritize better access to financing and simpler permitting, while non-adopters prioritize regulatory certainty and consistency and greater tariff and project economic certainty. This reflects different needs: existing users focus on facilitating project implementation, while non-adopters seek greater certainty before making investment decisions

THANK YOU

Petromindo Survey empowers your company to understand audiences better through tailored survey and polls. With access to a wide range of audiences through our database and media channels, we deliver data-driven insights that help you make smarter business decisions. Contact us today to start getting business-driving insights for your brand.

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