

# QHSSE HANDBOOK

**Our QHSSE Handbook is available  
in the following languages.**



English



Czech



Romanian



Bulgarian

# QHSSE HANDBOOK

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# QHSSE HANDBOOK

## 1

### MESAJ VENIT DE LA MANA

Dear Valued Contractors,

As the H&S Manager at **Rezolv Energy**, I want to express my sincere gratitude for your dedication and professionalism in delivering our renewable energy projects. Together, we are building a cleaner, more sustainable future through solar and wind power.

Our projects, whether in construction or during operations and maintenance (O&M), are only as strong as the people who make them possible. Your safety and well-being are our highest priorities. While you may not be direct employees of **Rezolv Energy**, you are essential partners in achieving our shared vision.

This handbook is designed to guide you through critical safety protocols, best practices, and environmental standards for every phase of our work. Whether you are installing wind turbines at height or maintaining solar panels in challenging conditions, we are committed to equipping you with the knowledge and tools to work safely and efficiently.

We encourage you to take an active role in safety, protect yourself and those around you. Speak up if you see a hazard, follow procedures, and never hesitate to use your 'Stop the Job' authority if something feels unsafe. By working together and applying these principles, we can ensure everyone returns home safely each day.

Please also remember our Project Grievance Mechanism, which offers a confidential way to raise concerns or complaints directly with **Rezolv Energy**, including the option to remain anonymous. We are committed to listening and responding promptly and respectfully.

Thank you for your commitment to safety, quality, and sustainability. Together, let's set the benchmark for QHSSE excellence across all renewable energy projects.

Stay safe, work smart, and build beautiful memories together.

**H&S Manager**  
Rezolv Energy



# QHSSE HANDBOOK

## 2 GOLDEN RULES FOR SAFETY

- **Safety First**

Always prioritize safety over all other tasks. Ensure that every action or decision you make considers the potential risks and how to minimize them. A safety-first approach helps prevent accidents and creates a culture where safety is everyone's responsibility.
- **Use PPE at All Times**

Personal protective equipment (PPE) such as helmets, gloves, goggles, and safety shoes should be worn as required for each task. PPE is designed to protect workers from physical harm, chemical exposure, and other potential hazards. Never skip wearing the appropriate PPE, even for short tasks.
- **Report Hazards Immediately**

If you notice any unsafe conditions, equipment malfunctions, or unsafe behaviors, report them immediately to your supervisor. Early reporting allows for prompt corrective actions to be taken, preventing potential accidents or injuries.
- **Plan your work and apply all safety measures**

Always adhere to the established safety procedures and guidelines for each task. These procedures are designed to mitigate risks and ensure that work is performed safely and efficiently. Deviating from them could expose workers to unnecessary hazards.
- **Stop the Job if Unsafe**

If at any point you believe the work environment or task is unsafe, stop immediately. Use your right to "Stop the Job" until hazards are addressed. No task is more important than ensuring the safety of yourself and others around you.
- **Maintain a Clean and Organized Workspace**

Keep work areas clean, organized, and free of clutter. A tidy workspace minimizes the chances of accidents, such as tripping over tools or equipment. It also ensures easy access to emergency exits and fire safety equipment.
- **Stay Alert and Focused**

Avoid distractions and stay focused on the task at hand. Fatigue, stress, or distractions can impair judgment and reaction time, increasing the risk of accidents. Stay aware of your surroundings and remain vigilant to identify and address potential dangers early.

# QHSSE HANDBOOK

## 3 PERSONNEL/CONTRACTOR QHSSE RESPONSIBILITIES

- **Policy and Protocol Awareness**

Familiarize yourself with **Rezolv Energy** H&S Policy, task-specific Risk Assessments, Method Statements, and local emergency and safety protocols to ensure clarity on safety measures and responsibilities.
- **Compliance with Safety and Environmental Rules**

Strictly adhere to all safety and environmental regulations outlined in policies and procedures to maintain a secure and sustainable work environment.
- **Hazard and Equipment Defect Reporting**

Immediately report any safety hazards, equipment defects, or unsafe conditions to your supervisor to prevent accidents or disruptions.
- **Follow Instructions for Safety and Protection**

Comply with all written and verbal instructions provided to safeguard your well-being, the safety of others, and environmental integrity.
- **Accident and Incident Reporting**

Report all accidents or incidents, regardless of their severity, to ensure proper investigation and corrective actions.
- **Professional Conduct in the Workplace**

Maintain orderly behavior and refrain from horseplay or any inappropriate activities that may pose risks.
- **Avoid Improvisation**

Do not improvise or alter procedures without proper authorization to avoid unforeseen hazards.
- **Equipment Maintenance and Reporting Defects**

Ensure all equipment is well-maintained and immediately report any malfunctions or damage to your supervisor.
- **Participation in H&S Training and Meetings**

Attend all H&S training sessions, meetings, and workshops to stay informed and enhance your safety knowledge.
- **Adherence to Procedures and Client Requirements**

Follow established procedures and client-specific requirements to ensure compliance and smooth operations.
- **Fire Safety Awareness**

Understand the fire evacuation procedures, know the locations of fire equipment, and identify emergency exit routes to respond effectively in emergencies.



An aerial photograph of a large-scale construction project. The central feature is a massive circular concrete structure, possibly a water treatment tank or a large foundation, which is currently being poured or finished. The surface of the concrete is a uniform grey color. Several workers, identifiable by their bright yellow safety vests and white hard hats, are positioned around the perimeter of the structure. Some are standing on a narrow walkway or scaffolding that runs along the edge, while others are closer to the center. The surrounding area is a mix of dirt and construction materials, with some equipment and hoses visible. The overall scene conveys a sense of large-scale industrial or infrastructure work.

# 4 BEHAVIORAL AND PSYCHOLOGICAL SAFETY



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## 4.1 Behavioral Safety

- Encourage proactive safety reporting to identify potential hazards.
- Promote hazard recognition to prevent accidents and injuries.
- Empower employees with "Stop the Job" authority for safety.
- Foster a culture of accountability for safe behaviors.
- Recognize and reward employees demonstrating safe practices.
- Conduct regular safety observations to improve workplace behavior.
- Provide training to enhance awareness of behavioral safety.



### **Fact**

*Studies show workplaces emphasizing behavioral safety see a significant reduction in accidents by encouraging hazard recognition and proactive safety actions.*

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## 4.2 Psychological Safety

- Foster open communication to discuss mental health concerns.
- Provide support systems for workers facing emotional challenges.
- Encourage seeking help without fear of stigma.
- Promote work-life balance to reduce stress.
- Train leaders to recognize signs of mental distress.
- Offer mental health resources and counseling services.
- Create a culture of inclusion and mutual respect.



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## 4.3 Preventing Fatigue and Staying Alert

- Take scheduled breaks to avoid exhaustion, especially during long shifts.
- Monitor for signs of fatigue, such as slower reaction times or difficulty concentrating.
- Rotate tasks among workers to reduce strain and maintain focus.
- Ensure adequate sleep and rest between shifts.
- Provide comfortable rest areas for breaks on-site. Ensuring that are no more than 10min away from the work front.
- Encourage workers to report if they feel too tired to work safely.
- Adjust work schedules during extreme weather to reduce strain.

### Myth vs. Fact

**Myth:** “I can push through fatigue as long as I take a quick break.”

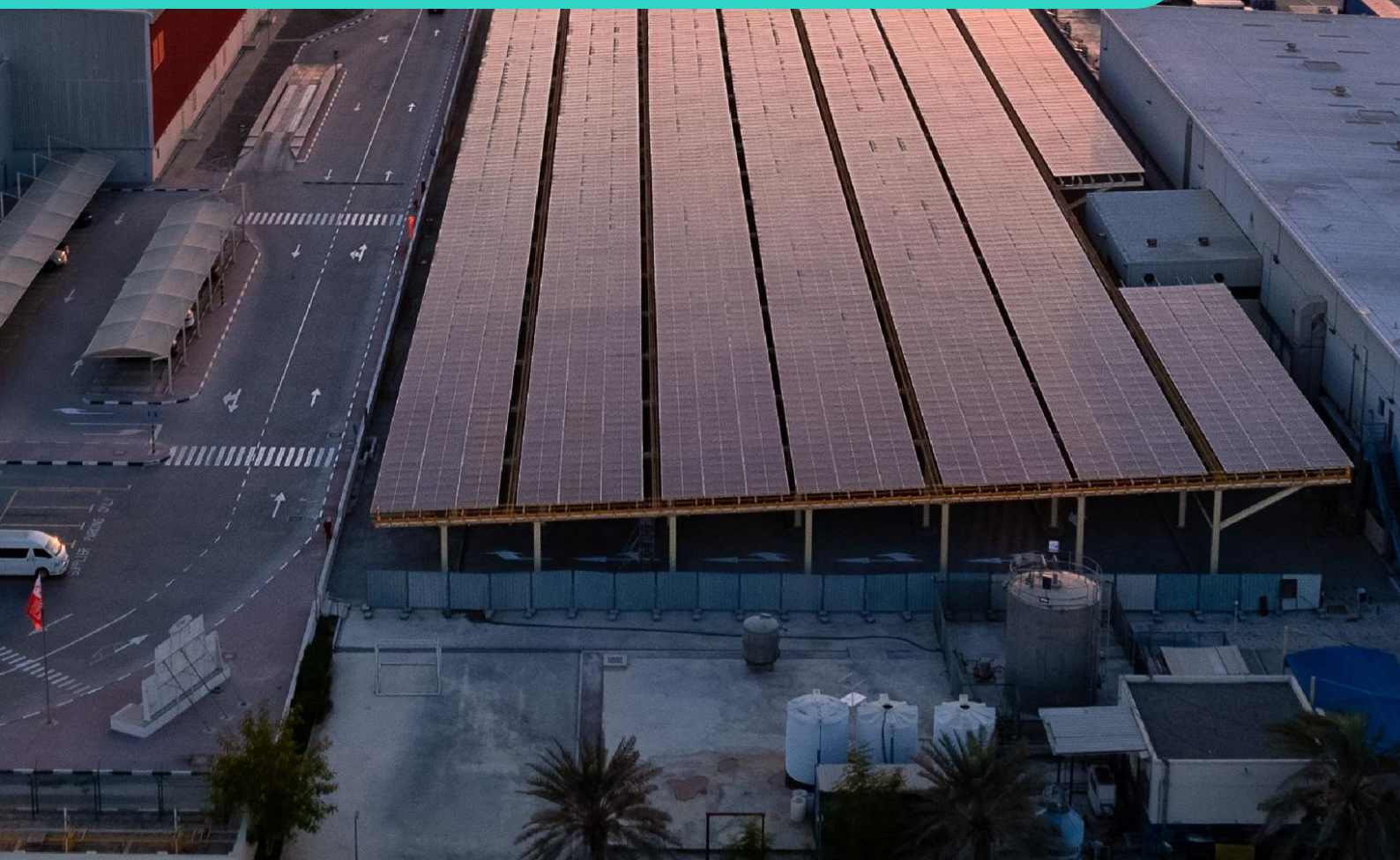
**Fact:** Fatigue is not easily fixed with a quick break. Chronic fatigue can impair cognitive function, decision-making, and reaction times, increasing the risk of accidents. A quick break might help momentarily, but adequate rest, sleep, and proper workload management are essential to maintain long-term alertness and safety.







## 5 CULTURAL AND COMMUNICATION TRAINING



# QHSSE HANDBOOK

## 5.1 Cultural Sensitivity Training for Multinational Teams

- Respect the cultural norms and traditions of all team members.
- Provide training on local customs and practices before workers arrive on-site.
- Encourage open communication and respect among team members from different backgrounds.
- Ensure that cultural differences are considered when planning meals, work schedules, and breaks.
- Promote a respectful and inclusive workplace for all team members.
- Address any cultural misunderstandings promptly and professionally.

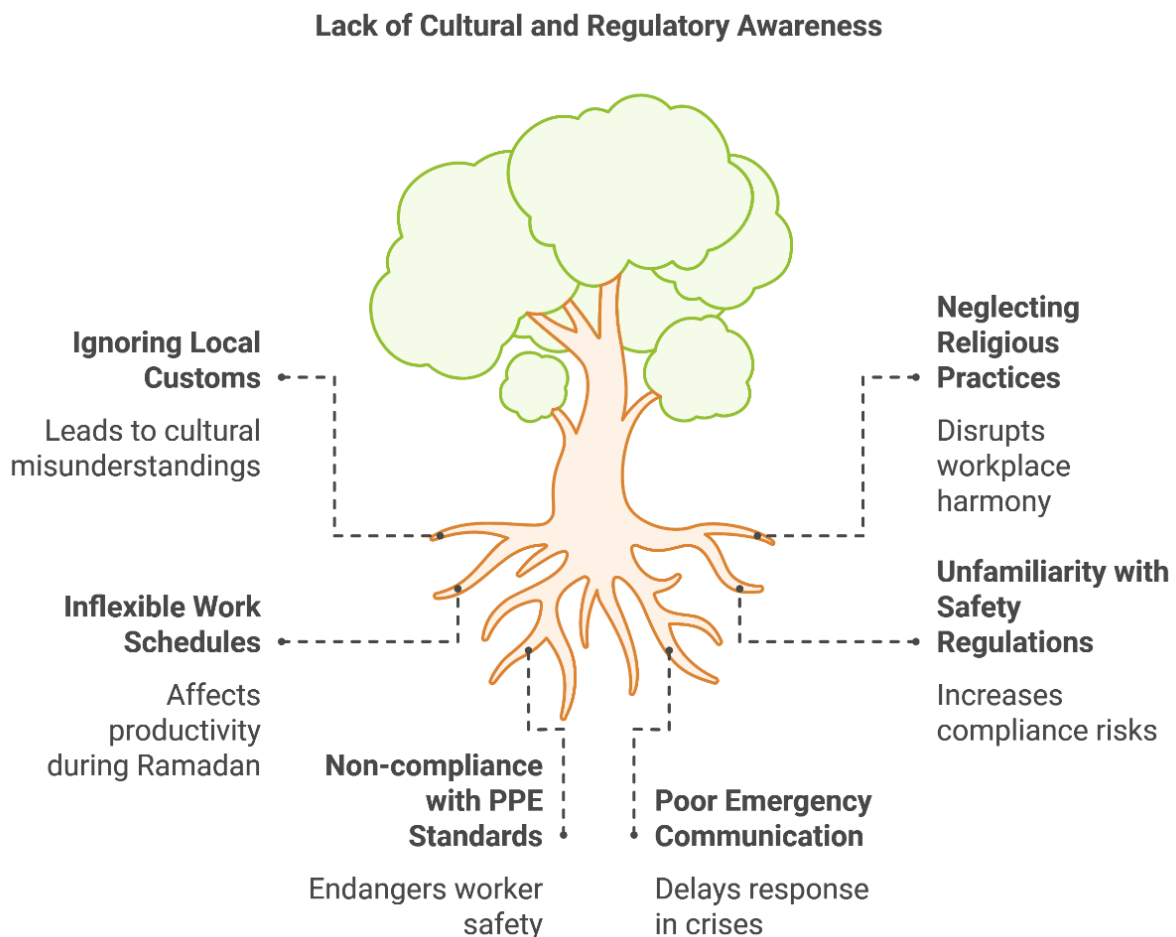




# QHSSE HANDBOOK

## 5.2 Cultural and Regulatory Awareness

- Respect local customs and cultural norms.
- Observe religious practices and schedules, such as prayer times for workers of different religion & ethnicity.
- Familiarize yourself with country-specific safety regulations and labor laws.
- Adhere to local requirements for PPE standards and safety training certifications.
- Establish clear communication with local authorities for emergency responses.
- Ensure that signage is available in English and local language.



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## 5.3 Remote Work and Communication Protocols

- Carry a charged radio or cell phone at all times.
- Maintain regular check-ins with the control center or team supervisor.
- Know the location of the nearest emergency services.
- Establish a pre-determined emergency signal for remote areas.
- Use a GPS tracker if working in isolated locations.
- Report any incidents or injuries immediately.
- Plan routes and share with the team before heading out.

### Myth vs. Fact

**Myth:** “As long as team members are working, there’s no need for regular communication in remote work.”

**Fact:** Regular communication is crucial for remote teams. Without clear and consistent check-ins, teams may experience misalignment, decreased productivity, and delayed responses. In fact, studies show that teams with frequent communication are 25% more effective in meeting deadlines and project goals.



An aerial photograph of a wind farm. In the foreground, a large white wind turbine stands on a green field. To its right, there is a construction or maintenance area with various equipment, including cranes and large white pipes. The middle ground shows several other wind turbines spaced out across a vast green landscape. The background features a distant horizon under a blue sky with scattered white clouds.

# 6 GENERAL H&S AND EMERGENCY PROCEDURES



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## 6.1 Introduction to HSE for Construction Workers

- Always prioritize safety over speed or productivity.
- Know the location of emergency exits and first aid kits.
- Know your hazards and preventative measures.
- Report any unsafe conditions to your supervisor immediately.
- Participate in daily safety briefings and toolbox talks.
- Always wear your PPE as required by the task.
- Adhere to site-specific safety rules and regulations.
- Remember that safety is everyone's responsibility.



### Did You Know!

*The concept of Safety Toolbox Talks originated from the construction and industrial sectors, where teams would literally gather around a toolbox at the start of the shift to discuss safety concerns, hazards, and daily tasks.*

*These quick, informal meetings were initially called “Toolbox Meetings” because workers would often stand around an actual toolbox on-site. Today, they're a globally recognized safety practice across various industries, helping teams stay alert and informed—minus the physical toolbox in most cases!*



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## 6.2 Emergency Procedure

- Know the locations of emergency exits and evacuation routes.
- Understand the sound of alarm systems used on site.
- Follow the instructions of emergency response personnel.
- Gather at designated assembly points after evacuation.
- Report any missing coworkers to emergency responders.
- Keep emergency numbers easily accessible.
- Participate in emergency drills regularly.

Emergency Response Contacts	
Site H&S Manager	Insert phone number
Site Manager	Insert phone number
Project Manager	Insert phone number
First Aid responder	Insert phone number
Local Emergency Services	112



### Did You Know!

*When first aid is administered within the first minutes of an injury or medical emergency, it can significantly increase the chances of recovery. In fact, early intervention can prevent minor injuries from becoming life-threatening and help reduce the severity of conditions like heart attacks, strokes, and severe bleeding.*

# QHSSE HANDBOOK

## 6.3 Stop Work Authority

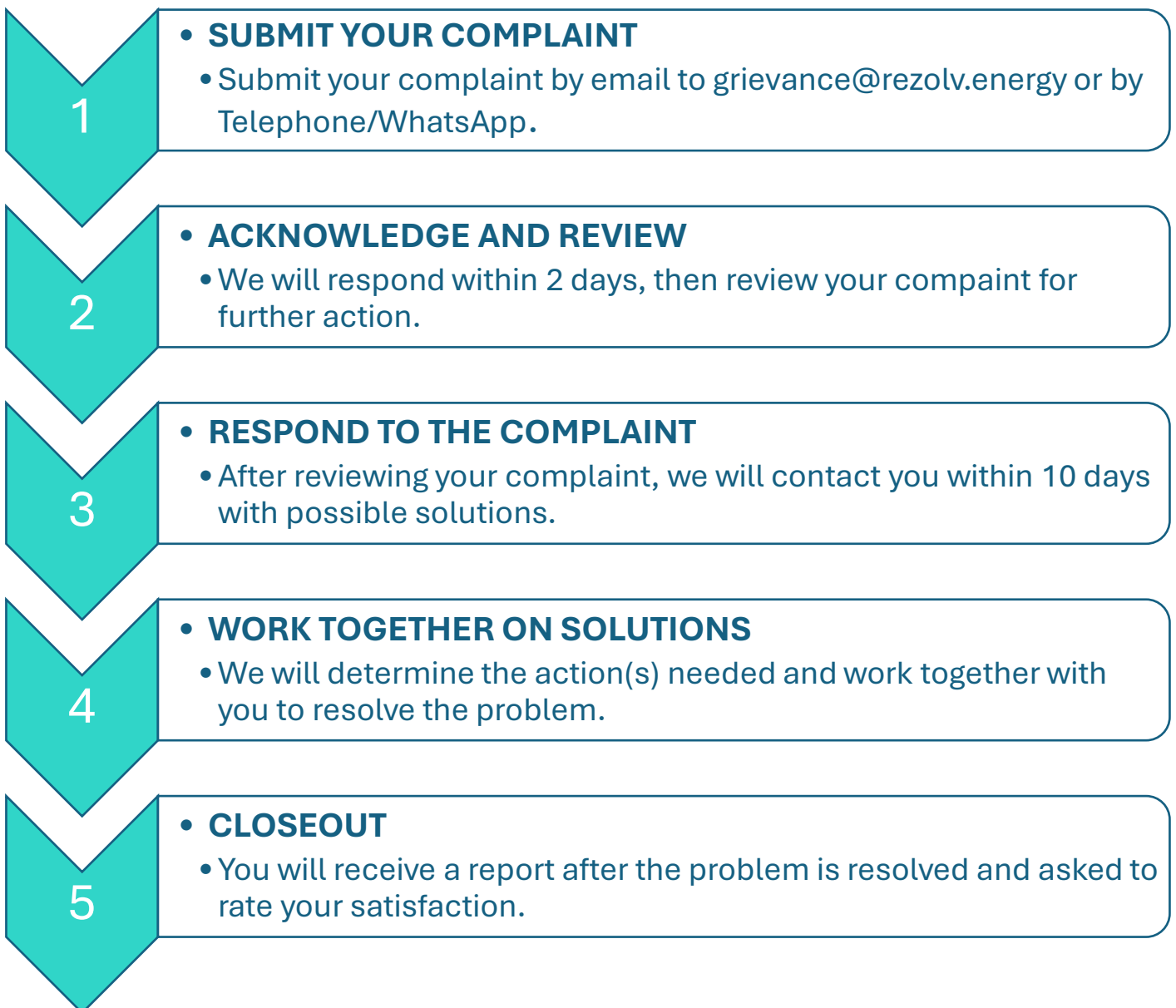
- All employees have the authority to stop work if they observe unsafe conditions, behaviors, or activities.
- Cease operations immediately if a hazard is identified.
- Inform your supervisor or responsible authority about the issue.
- Clearly explain the observed hazard or unsafe condition.
- Do not resume work until the hazard is addressed and operations are deemed safe.
- Employees will face no consequences for exercising “Stop Work Authority” in good faith.
- Safety always comes first—if in doubt, stop and report.



# QHSSE HANDBOOK

## 6.4 Project Grievance Mechanism

- Rezolv Energy encourages everyone to voice their concerns freely.
- Grievances can be submitted through email, hotline, WhatsApp or in person.
- All grievances will be documented with relevant details.
- Issues will be screened for priority and action required.
- Investigations will lead to corrective or preventive actions.
- Resolutions will be communicated, and follow-up ensured.



# QHSSE HANDBOOK

## 6.5 Reporting and Documentation Procedures

- Document all maintenance activities in the site logbook.
- Report any safety incidents or near-misses promptly.
- Keep records of equipment inspections and repairs.
- Use site-specific forms for documenting electrical tests.
- Maintain a record of training sessions and certifications.
- Review documentation regularly for compliance with safety protocols.
- Share key findings with the team to improve safety practices.



### **Quick Reminder!**

*Effective reporting and documentation not only improve safety but also enhance your company's ability to learn from past incidents and make improvements.*





# QHSSE HANDBOOK

## 6.6 Use of Communication Devices for Safety

- Keep radios or communication devices charged and functional.
- Use designated channels for emergency communications.
- Speak clearly and calmly during emergency calls.
- Do not use phones or radios while operating machinery unless stationary.
- Report communication device malfunctions immediately.
- Maintain a line of sight or radio contact with spotters.
- Use hand signals when radios are not available.
- Clear communication plan with roles and responsibilities



### **Did You Know!**

*In high-risk work environments, effective communication is proven to reduce incidents by up to 30%. A recent study found that workers who have access to reliable communication devices, such as walkie-talkies or smartphones with safety apps, can report hazards and call for help immediately, significantly decreasing response time and the likelihood of injury.*





7

## WORKPLACE SAFETY PRACTICES



# QHSSE HANDBOOK

## 7.1 Working at Heights

- Use approved fall protection equipment, such as harnesses.
- Inspect all fall protection gear before each use.
- Always tie-off when working 2 meters or more above ground.
- Keep your work area tidy to prevent tripping hazards.
- Never lean over guardrails or try to reach beyond safe distances.
- Ensure ladders are stable and placed on a secure surface.
- Do not work at heights during high winds or thunderstorms.

### **Fact**

*In the UK, falls from height accounted for 30% of all workplace fatalities in 2022/23. Health and Safety Executive (HSE) – Workplace Fatal Injuries Report 2022/23*

*In the USA, falls are the leading cause of death in construction, with hundreds of fatalities reported annually. Occupational Safety and Health Administration (OSHA) – Fatal Four Construction Hazards*



# QHSSE HANDBOOK

## 7.2 Scaffolding safety

- Inspect scaffolding for stability before use.
- Only use scaffolding built by trained personnel.
- Do not overload scaffolding with materials or workers.
- Use guardrails and toe boards on all scaffolding levels.
- Make sure scaffolds are inspected and tagged
- Maintain a clean and clear platform.
- Use access ladders or steps, never climb on cross braces.
- Report any damage to scaffolding immediately.



### **Quick Reminder!**

*Always Ensure Scaffolding is Secure Before Use*

**Check stability:** Verify that scaffolding is properly erected and secured to prevent tipping or shifting.

**Inspect components:** Ensure all parts, including platforms, guardrails, and braces, are in good condition and meet safety standards.

**Follow load limits:** Do not exceed the recommended weight limit and avoid overcrowding the scaffold.

# QHSSE HANDBOOK

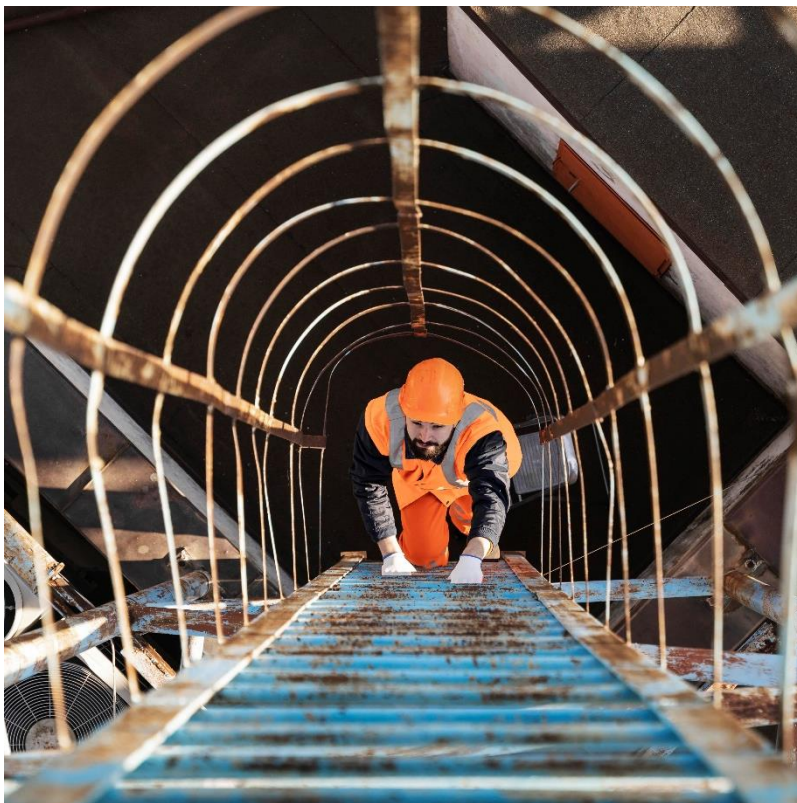
## 7.3 Safe Use of Ladders

- Inspect ladders for damage before each use.
- Place ladders on stable ground and secure them to prevent slipping.
- Maintain three points of contact when climbing.
- Do not stand on the top rung of a ladder.
- Only use ladders for their intended purpose.
- Do not exceed the weight capacity of the ladder.
- Avoid using ladders in high wind conditions or dust storms common in the region.

### Myth vs. Fact

**Myth:** “It’s safe to stand on the top rung of a ladder if you’re careful.”

**Fact:** Standing on the top rung or step significantly increases the risk of losing balance and falling. Always keep at least three points of contact and avoid the top two steps unless the ladder is specifically designed for standing there.





# QHSSE HANDBOOK

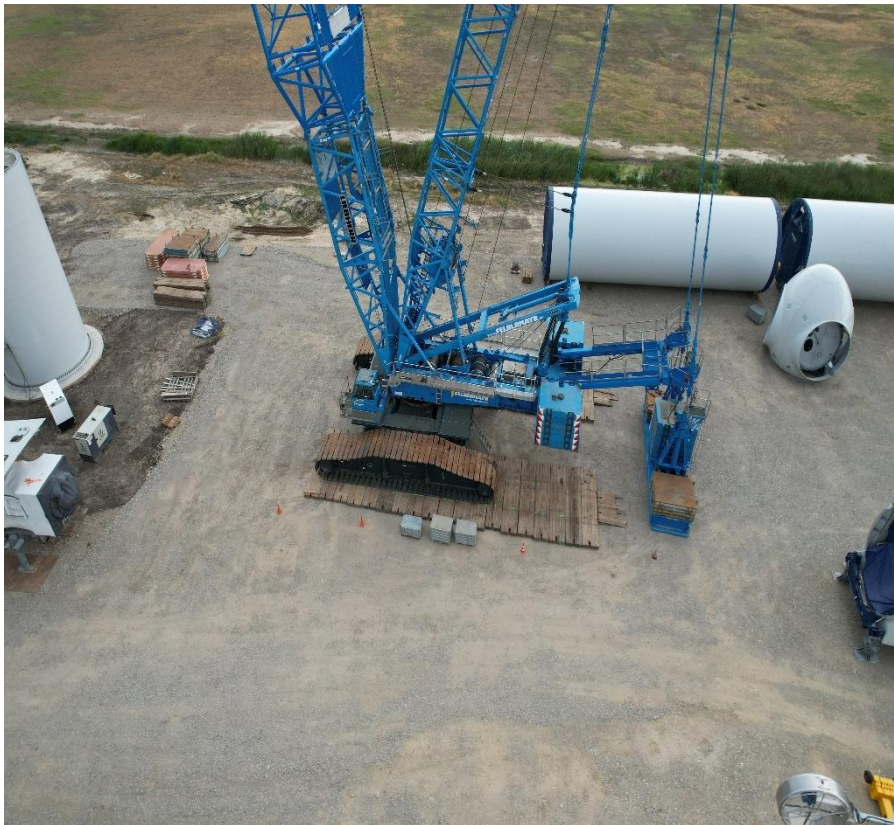
## 7.4 Crane and Hoisting Operations

- Only trained personnel should operate cranes.
- Inspect slings, chains, and lifting equipment before use.
- Ensure loads are properly balanced and secured. Always use taglines.
- Maintain a safe distance from the crane boom and suspended loads.
- Use hand signals or radios to communicate with the crane operator.
- Never walk under a suspended load.
- Follow the crane's load capacity limits.
- Attending the lifting plan briefing.
- Communication plan set in place before commencing activities.



### Quick Reminder!

**Communication is Key:** Use clear hand signals or radio communication between the operator and the signal person to avoid misunderstandings.



# QHSSE HANDBOOK

## 7.5 Good Housekeeping Practices

- Keep work areas free of debris and materials.
- Clean up spills immediately to prevent slips.
- Store tools and equipment in designated areas.
- Keep walkways and exits clear at all times.
- Remove trip hazards like cables and hoses.
- Dispose of waste in proper containers.
- Maintain a tidy work environment to reduce risks.

### Key Elements of Good Housekeeping



### **Did You Know!**

*Good housekeeping on a worksite can reduce accidents by up to 50%. A tidy and organized work environment prevents trips, slips, and falls, which are among the most common causes of workplace injuries. In fact, a study found that cluttered areas and poorly stored materials lead to increased risk of accidents, and workers who maintain cleanliness and orderliness are less likely to experience these incidents.*





## 8 EQUIPMENT AND MATERIAL HANDLING

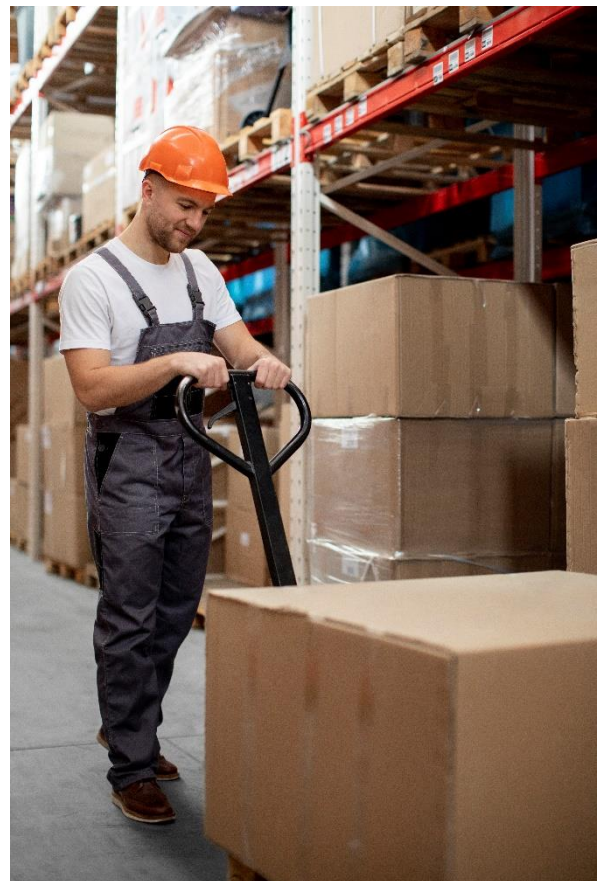




# QHSSE HANDBOOK

## 8.1 Manual Handling Safety

- Use proper lifting techniques: bend at your knees, not your back.
- Get help when lifting heavy or awkward loads.
- Use mechanical aids like dollies, cranes, or forklifts whenever possible.
- Keep the load close to your body while lifting.
- Avoid twisting your body while carrying a load.
- Plan the route before moving large items.
- Take regular breaks to avoid fatigue when lifting repeatedly.
- PPE: Wear suitable clothing, gloves and footwear.



# QHSSE HANDBOOK

## 8.2 Handling Solar Panels & Wind turbine spare parts for assembly Safely

- Handle panels and wind turbine spare parts with care to avoid injuries and damage.
- Use two-person lifting techniques for large items.
- Wear gloves to protect against sharp edges.
- Store panels and spare parts in designated areas to prevent damage.
- Ensure panels and spare parts are properly secured during transportation.
- Avoid dropping or placing heavy objects on panels and spare parts.
- Check for cracks or defects before installation.



### **Environmental Insight:**

#### ***Did You Know?***

*Solar panels and wind turbines are designed to last 25+ years, but improper handling during installation or maintenance can reduce their lifespan and increase environmental waste.*



# QHSSE HANDBOOK

## 8.3 Safe Handling of Batteries

- Wear insulated gloves when handling batteries.
- Disconnect battery terminals before maintenance.
- Avoid dropping batteries as they can leak hazardous chemicals.
- Store batteries upright in a cool, dry place.
- Use spill kits for acid spills.
- Keep flammable materials away from battery storage areas.
- Follow the manufacturer's guidelines for maintenance.



### Did You Know!

*Improper handling of batteries, particularly lithium-ion and lead-acid batteries, can result in dangerous incidents such as fires, chemical leaks, and electric shocks. In fact, battery-related fires account for over 3,000 incidents annually in the workplace, primarily due to short-circuiting, overcharging, or improper disposal.*



# QHSSE HANDBOOK

## 8.4 Vehicle and Equipment Safety

- Perform pre-use inspections on all vehicles and machinery.
- Always wear seat belts when operating or riding in vehicles.
- Use spotters when reversing or maneuvering in tight spaces.
- Follow speed limits and designated paths on site.
- Never leave vehicles or machinery unattended with the engine running.
- Report any mechanical issues immediately.
- Keep equipment and vehicle loads balanced to avoid tipping.



### **Quick Reminder!**

*Ensure that only qualified operators are allowed to use vehicles and equipment. Proper training reduces the risk of accidents and enhances operational efficiency.*



# QHSSE HANDBOOK

## 8.5 Using Power Tools Safely

- Inspect power tools before use for any damage or defects.
- Wear safety glasses and hearing protection when using power tools.
- Use the correct tool for the job; avoid makeshift tools.
- Disconnect tools from power when changing accessories.
- Keep cords clear of the cutting path and avoid trip hazards.
- Do not operate tools in wet conditions unless rated for such use.
- Store tools in a dry and secure location when not in use.



### **Quick Reminder!**

*Always turn off and unplug power tools when not in use or when changing attachments to prevent accidental activation.*

# QHSSE HANDBOOK

## 8.6 Safe Use of Personal Protective Equipment (PPE)

- Always wear safety glasses, High-visibility vest, safety shoes and hard hats on site.
- Inspect PPE for damage before use.
- Use arc-rated PPE when working on electrical equipment.
- Replace any damaged or worn-out PPE immediately.
- Store PPE in a clean, dry place to maintain its condition.
- Wear high-visibility vests when working near moving equipment.
- Ensure PPE fits properly and does not restrict movement.







## 9 FIRE AND ELECTRICAL SAFETY

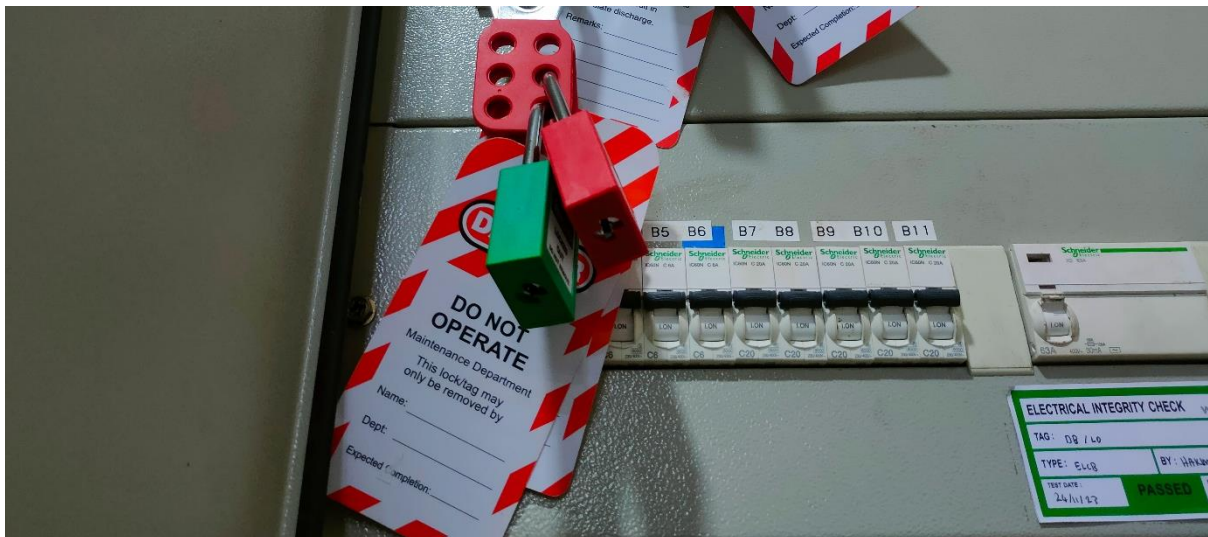




# QHSSE HANDBOOK

## 9.1 Electrical Safety

- Treat all circuits as live until proven otherwise.
- Follow lockout/ tag-out procedures before starting work on electrical systems.
- Only qualified personnel should handle electrical tasks.
- Keep a safe distance from exposed live parts.
- Wear arc-rated PPE when working on electrical panels.
- Inspect cables for damage before use.
- Report any signs of damage or malfunction in electrical systems.
- Avoid overloading outlets and extension cords
- Ensure proper ground earthing.
- Use fire extinguishers rated for electrical fires.





# QHSSE HANDBOOK

## 9.2 Emergency Shutdown Procedures

- Know the location of the main disconnect switches for the electrical system.
- Shut down the inverter before working on panels or wiring.
- Use lockout/ tag-out when performing emergency maintenance.
- Coordinate with the control center during emergency shutdowns.
- Inform all team members before initiating a shutdown.
- Test and confirm that the system is de-energized.
- Report the reason for the shutdown to the site supervisor.

### **Fact**

*Clear and well-documented emergency shutdown procedures can reduce response time during critical situations by up to 50%, significantly minimizing risks to personnel, equipment, and the environment. In high-risk industries, delays in emergency shutdowns are one of the leading causes of escalated incidents and major damages.*



# QHSSE HANDBOOK

## 9.3 Fire Safety and Fire Extinguisher Use

- Know the types and locations of fire extinguishers on site.
- Use the PASS method: Pull the pin, Aim, Squeeze, Sweep.
- Only attempt to extinguish small fires if trained.
- Evacuate immediately if a fire is too large to control.
- Keep flammable materials away from heat sources.
- Store chemicals according to fire safety guidelines.
- Report any fire.
- Follow the Emergency Response Plan instructions.
- Regularly inspect and maintain fire extinguishers to ensure they are fully operational.
- Do not block access to fire extinguishers or fire exits.
- Understand the specific fire risks associated with chemicals and equipment used on-site.



### Did You Know!

*In many fire-related deaths, smoke inhalation is the leading cause of fatality rather than the flames themselves. It's estimated that 60–80% of fire-related deaths occur due to smoke inhalation, which can happen even in a relatively small fire. Toxic gases, such as carbon monoxide, can make it difficult to breathe and cause unconsciousness, often before the flames ever reach the victim.*

# QHSSE HANDBOOK

## 9.4 Fire Prevention Measures During Maintenance

- Remove dry leaves and debris from around inverters and panels.
- Use non-flammable cleaners for panel maintenance.
- Inspect wiring for damage that could cause short circuits.
- Avoid smoking near the plant and storage areas.
- Report any unusual smells or sparks during inspections.
- Ensure fire extinguishers are easily accessible.
- Clean oil spills immediately in the generator area.

### Myth vs. Fact

**Myth:** “Fire risks only occur during welding or cutting activities.”

**Fact:** Fire risks can occur during all types of maintenance activities, not just welding or cutting. Even seemingly routine tasks like equipment inspections, electrical work, or fueling machinery can create fire hazards. Overheating equipment, sparks from electrical faults, or flammable materials can lead to fires.



# QHSSE HANDBOOK

## 9.5 First Aid for Electrical Shock

- Disconnect the power source before assisting the victim.
- Call emergency services immediately.
- Do not touch the victim directly if they are still in contact with a live source.
- Use a non-conductive object to separate the victim from the electrical source.
- If trained, perform CPR if the victim is unresponsive.
- Keep the victim calm and still until help arrives.
- Report the incident to the supervisor after providing first aid.





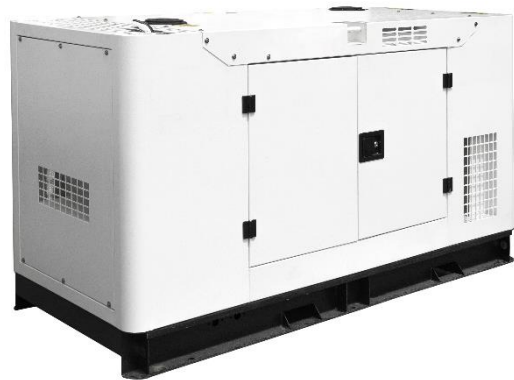
# QHSSE HANDBOOK

## 9.6 Safe Use of Generators

- Position generators in well-ventilated areas to prevent carbon monoxide buildup.
- Keep flammable materials away from generators.
- Follow manufacturer instructions for fueling and maintenance.
- Use grounding rods to prevent electrical shock.
- Inspect generators before each use for leaks and other issues.
- Shut down the generator and allow it to cool before refueling.
- Use only approved containers for fuel storage.

### **Fact**

*Improper use of generators can lead to air pollution and environmental harm. Diesel and gasoline-powered generators release carbon monoxide and particulate matter, which contribute to air quality issues and health risks. In fact, running a generator in an enclosed or poorly ventilated area can cause carbon monoxide poisoning, which is deadly.*







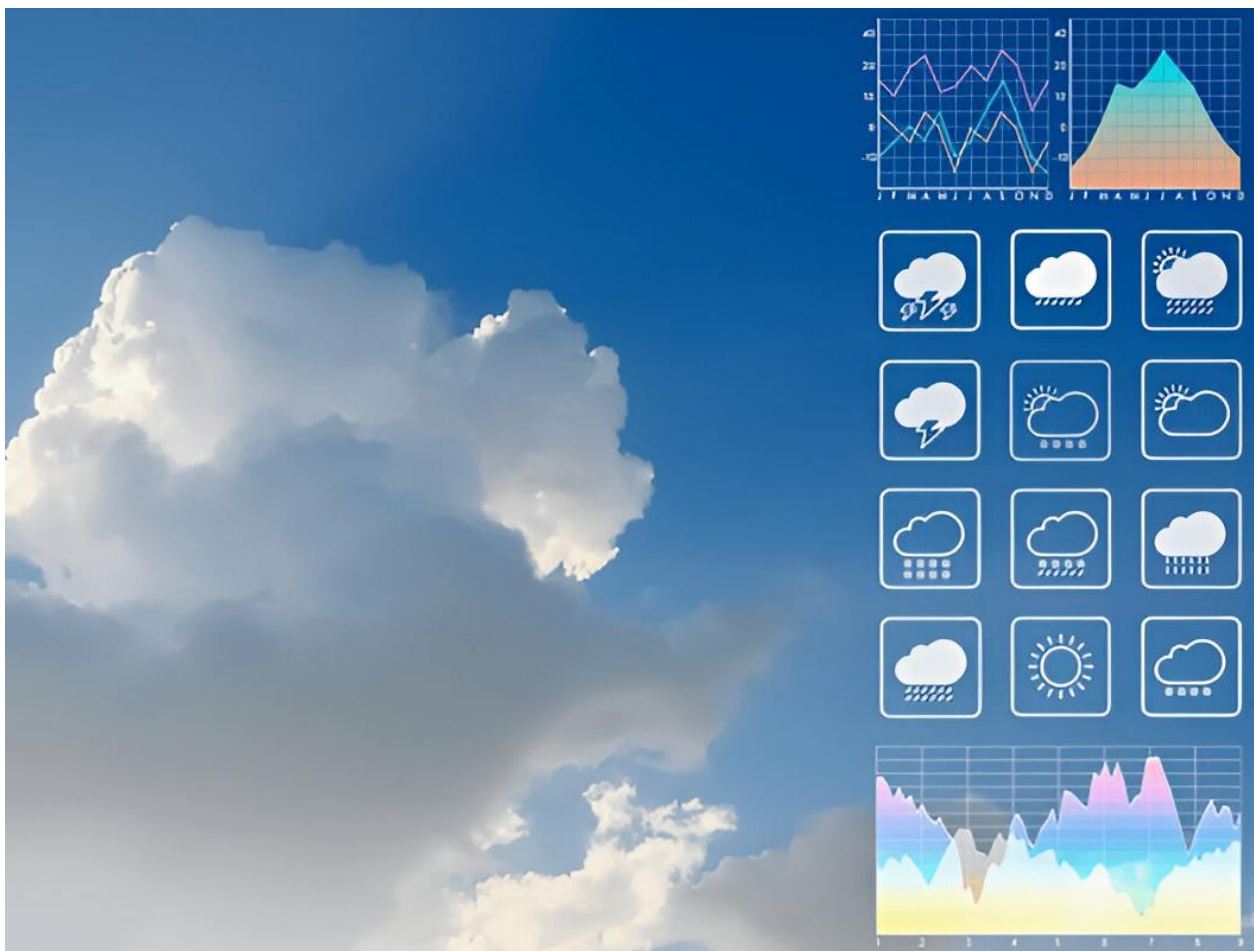
# 10 ENVIRONMENTAL AND WEATHER CONSIDERATIONS



# QHSSE HANDBOOK

## 10.1 Planning for Adverse Weather Conditions

- Monitor weather forecasts daily for sudden changes.
- Plan ahead for extreme weather events like heatwaves, heavy rains, thunderstorms or extreme cold temperatures
- Secure loose materials and equipment before high winds or storms.
- Ensure that drainage systems are clear to prevent water pooling.
- Suspend outdoor activities if weather conditions pose a risk to worker safety.
- Resume work only after verifying that conditions are safe.
- Follow emergency protocols specific to each type of weather event.



# QHSSE HANDBOOK

## 10.2 Weather Precautions (Working in Extreme Heat)

- Wear light, breathable clothing and a hat to protect from the sun.
- Drink water regularly to stay hydrated.
- Take regular breaks in shaded or cool areas.
- Use sunscreen to prevent sunburn.
- Recognize symptoms of heat stress (dizziness, fatigue, nausea).
- Comply with local regulations for work in extreme heat – with mandatory breaks for hydration and sheltering.
- Report any signs of heat-related illnesses immediately.



### **Did You Know!**

*The human body has an amazing ability to cool itself by sweating. In extreme heat, the body can produce up to 2 liters of sweat per hour to help regulate its temperature. However, when temperatures are high, the sweat might evaporate too quickly, which is why staying hydrated is essential to keep this cooling process effective!*

# QHSSE HANDBOOK

## 10.3 Weather Precautions (Working in Extreme Cold)

- Wear insulated clothing and gloves to retain body heat.
- Take breaks indoors or in heated shelters.
- Keep dry and avoid getting wet to prevent hypothermia.
- Watch for signs of frostbite (numbness, pale skin).
- Use proper footwear with traction to prevent slips.
- Warm up cold tools before use to avoid injury.
- Report symptoms of cold stress to your supervisor.
- Evaluate the floor condition to prevent slipping and tripping due to ice.
- Before entering WTG hardstand evaluate if the blade tips are loaded with ice.





# QHSSE HANDBOOK

## 10.4 Weather Precautions (Storms)

- Cease outdoor activities during severe dust storms.
- Use face masks and safety goggles to protect against dust inhalation.
- Secure loose materials and equipment before the storm hits.
- Wait for the dust storm to subside before resuming work.
- Follow local weather alerts for dust storm warnings.
- Clean air filters of equipment after a dust storm.
- Inspect electrical connections for dust buildup.



### **Quick Reminder!**

*Dust storms can escalate quickly, making it essential to plan ahead and ensure everyone's safety by adhering to these precautions.*



# QHSSE HANDBOOK

## 10.5 Seasonal Maintenance Tips

- Clean snow off panels using soft brushes during winter.
- Adjust maintenance schedules during the rainy season to avoid wet conditions.
- Inspect panels and inverters for damage after storms.
- Ensure proper drainage to prevent water accumulation near panels.
- Remove leaves and debris during autumn to maintain optimal panel efficiency.
- Use UV-protective clothing when working during summer months.
- Adapt maintenance practices based on seasonal changes.





# QHSSE HANDBOOK

## 10.6 Managing Wildlife and Pest Control

- Inspect installations for bird nests or insect infestations.
- Use non-toxic repellents for pests.
- Avoid harming protected wildlife; contact local authorities for assistance.
- Maintain clean areas around panels to discourage pests.
- Repair any damage caused by animals to wiring or panels.
- Use proper barriers to keep larger animals away from the plant.
- Regularly check for signs of animal intrusion.



### **Environmental Insight:**

*In industries such as construction, renewable energy, and agriculture, wildlife and pests can pose significant safety and environmental risks. For example, certain pests like rodents can damage electrical equipment, while others, such as snakes, wasps, or mosquitoes, can carry diseases and cause injuries. In fact, unaddressed pest problems can lead to operational delays, environmental damage, and increased health hazards.*



# QHSSE HANDBOOK

## 10.7 Managing Vegetation - Ground - Mounted Systems

- Trim vegetation regularly to prevent shading of panels.
- Use appropriate tools such as hedge trimmers and mowers.
- Wear PPE like gloves, goggles, and hearing protection during trimming.
- Avoid using chemicals that could damage the panels or the environment.
- Keep an eye out for animal nests or other obstructions.
- Maintain a clear path around electrical components.
- Report any damage caused by overgrowth of vegetation.



### **Environmental Insight:**

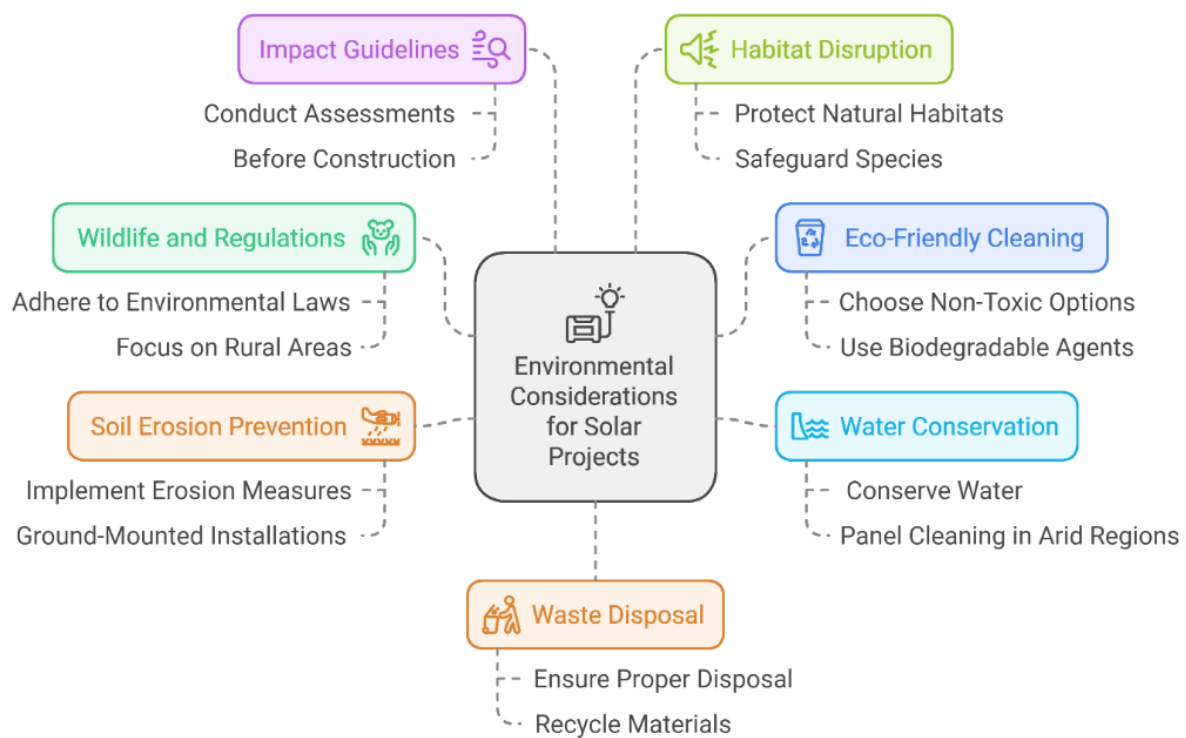
*Proper vegetation management around ground-mounted solar systems is not just about maintaining site aesthetics—it's crucial for system efficiency and environmental balance. Overgrown vegetation can shade solar panels, reducing energy output by up to 30%, while unchecked plant growth may also pose fire hazards and attract pests.*



# QHSSE HANDBOOK

## 10.8 Environmental Considerations for Wind & Solar Projects

- Respect local wildlife and environmental regulations, in both rural and urban areas
- Most of our projects are located near or inside NATURA2000 sites.
- Use non-toxic and biodegradable cleaning agents to minimize environmental impact.
- Implement measures to prevent soil erosion around ground-mounted installations,
- Follow local environmental impact assessment guidelines before beginning construction.
- Minimize disruption to natural habitats, particularly in NATURA2000 sites where may encounter protected species.
- Ensure proper disposal of waste and recycling of materials according to local regulations.



# QHSSE HANDBOOK

## 10.9 Environmental Impact Reduction Strategies

- Minimize the use of harmful chemicals in maintenance activities.
- Use energy-efficient lighting and equipment on-site.
- Use renewable energy sources for site operations where feasible.
- Train workers on energy-saving practices.
- Track and report the environmental impact of site activities.
- Set goals for reducing emissions and improving efficiency.



### **Environmental Insight:**

*Reducing your environmental footprint not only helps in achieving sustainability goals but also strengthens your brand and meets growing regulatory requirements. Key strategies include using renewable energy, implementing water-saving technologies, promoting sustainable materials in operations, and educating employees on reducing waste and energy use. These efforts contribute to a greener future and create long-term cost savings.*







# 11

## TECHNICAL MAINTENANCE AND INSPECTIONS



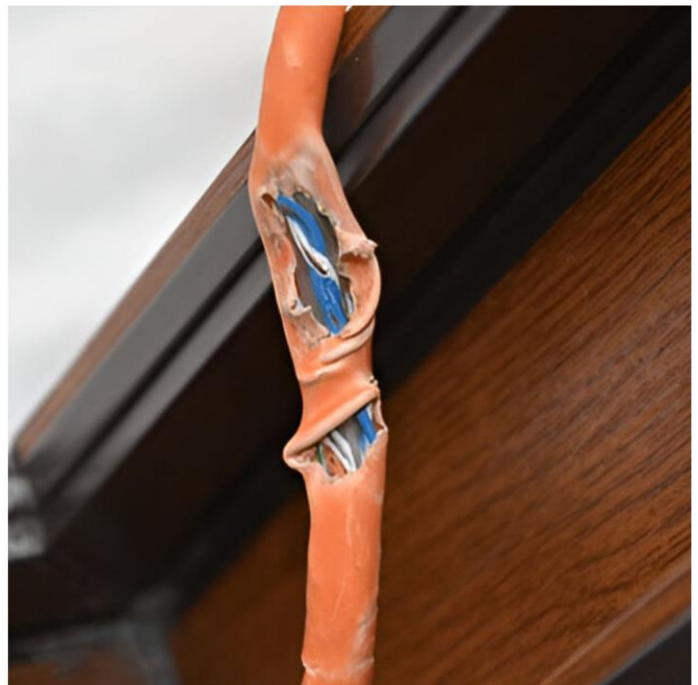
# QHSSE HANDBOOK

## 11.1 Inspection of Wiring and Connections

- Inspect for signs of wear, fraying, or corrosion on wires.
- Ensure connections are tight and secure.
- Look for signs of overheating such as discolored insulation.
- Use insulated tools for making adjustments.
- Test for continuity before re-energizing circuits.
- Report any irregularities to your supervisor.
- Follow electrical codes and site-specific standards during inspections.

### **Fact**

*Over 30% of electrical fires in workplaces are caused by faulty wiring and poor connections. Issues like loose connections, frayed wires, and corroded terminals can lead to overheating, short circuits, and even electrical fires if not regularly inspected and maintained.*





# QHSSE HANDBOOK

## 11.2 Working in Confined Spaces

- Test air quality before entering confined spaces.
- Only trained personnel should enter confined spaces.
- Keep a spotter outside the confined space during work.
- Use ventilation equipment to ensure proper air flow.
- Follow the entry and exit procedure strictly.
- Always use appropriate PPE such as respiratory protection.
- Do not enter confined spaces alone.



### **Fact**

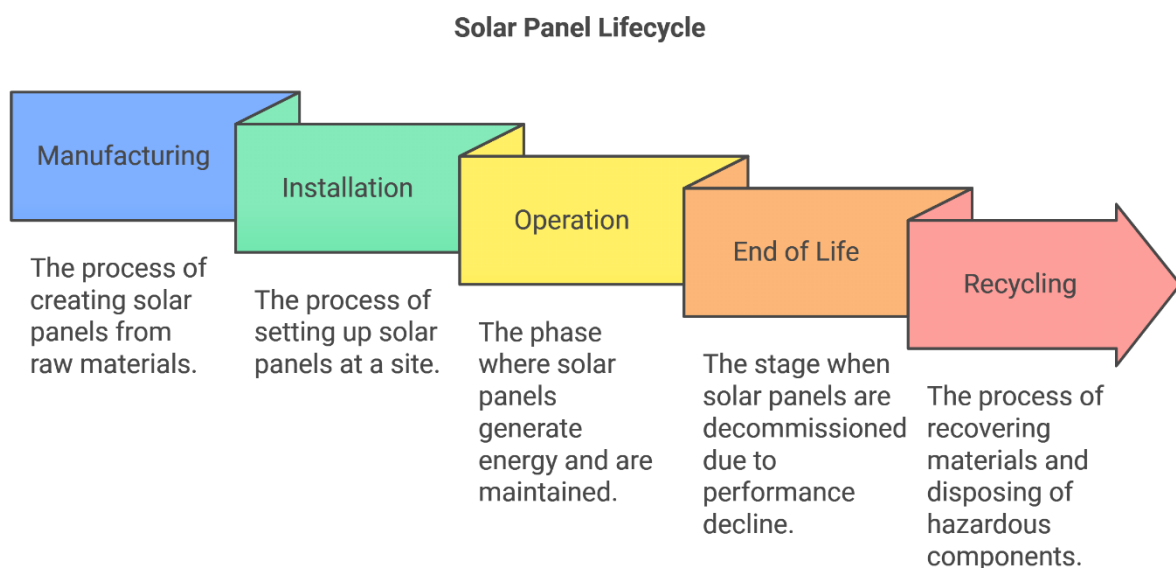
*Confined spaces are responsible for over 50% of workplace fatalities related to hazardous environments, often due to toxic atmospheres, oxygen deficiency, or poor ventilation. Many incidents occur because workers underestimate the risks or lack proper training for confined space entry.*



# QHSSE HANDBOOK

## 11.3 End-of-Life Disposal for Solar Equipment & Wind turbine spare parts

- Follow local regulations for the disposal of hazardous materials.
- Recycle components whenever possible to minimize environmental impact.
- Use certified recycling facilities for hazardous materials like batteries, hydraulic oils.
- Clean and decontaminate equipment before disposal.
- Label and document all items for disposal.
- Store end-of-life equipment away from operational areas until pickup.
- Train workers on proper disposal procedures for each type of equipment.







# 12

## AUDIT AND COMPLIANCE



# QHSSE HANDBOOK

## 12.1 Safety Audits and Inspections

- Conduct regular safety audits to identify potential risks.
- Inspect all equipment, including electrical systems, for compliance with safety standards.
- Use checklists to ensure all safety measures are reviewed.
- Involve workers in identifying hazards and suggesting improvements.
- Review findings with the entire team and implement corrective actions.
- Document all audits and inspections for future reference.
- Use safety audits as an opportunity to reinforce best practices and training.





# QHSSE HANDBOOK

## 12.2 Preparing for Site Audits

- Keep all safety and training records up-to-date and accessible.
- Review safety protocols with team members before an audit.
- Conduct a mock audit to identify potential areas of improvement.
- Ensure all equipment is in compliance with safety standards.
- Address any safety issues identified during the mock audit.
- Clearly mark safety zones, emergency exits, and first aid stations.
- Present a positive attitude during the audit and answer questions truth



# 13 CONCLUSIONS

The Rezolv Energy QHSSE Handbook provides a clear and practical guide to safety responsibilities for both the company and its employees. It is designed to ensure the well-being of everyone involved in the construction and operations & maintenance (O&M) of our solar power plants & wind farms.

This handbook outlines:

- **General safety rules**
- **Specific requirements for the construction phase**
- **Best practices for ongoing operations and maintenance**

It reflects the unique conditions across all countries where Rezolv Energy operates and serves as a foundation for creating a safe work environment.

**Safety is a shared responsibility.** Every employee plays a vital role in identifying hazards, following protocols, and fostering a culture where safety comes first. While this handbook is an essential tool, its true value lies in our collective commitment to applying these principles consistently—every task, every day.

As our industry evolves, so must our safety practices. Continuous improvement and adaptability are key to meeting new challenges. By working together and embracing these standards, we can achieve our goal: **a safe workplace where every worker returns home safely.**

Let this handbook be a reminder of our dedication to protecting ourselves and our colleagues. Through vigilance and collaboration, we not only safeguard lives but also contribute to the success and sustainability of Rezolv Energy.

# QHSSE HANDBOOK

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