LET THERE BE NEW LIGHT

SPIKE LEE'S UPCOMING *HIGHEST 2 LOWEST* REPRESENTS A REPLICABLE CASE STUDY IN THE USE OF CLEAN POWER ON AND AROUND SET.

WRITTEN BY MATT WARREN

Denzel Washington in *Highest 2 Lowest*.

New tools and technologies have made it possible for production practices to be more environmentally responsible in response to our new climate reality. While sustainable approaches have become more evident in the form of water stations and reusable bottles replacing plastic bottles on set, or compost and recycling bins alongside garbage receptacles, a significant reduction to the carbon footprint of a production is occurring within the electrical department. And in that arena, the green approach is not only the right thing to do for the planet, but it also often represents significant cost savings.

According to the U.S. Department of Energy, LED lighting uses 75% less electricity than traditional lights. Using rechargeable batteries and electric generators can help alleviate the need for pricey diesel fuel, while at the same time providing a quieter sound environment for your boom op.

For a good example of this new clean-energy focus—and the revised workflow it necessitates—look no further than *Highest 2 Lowest*, Spike Lee's upcoming reimagining of the 1963 Akira Kurosawa crime-drama masterpiece *High and Low*.

Lensed by acclaimed DP Matthew Libatique, the production staked sustainability as one of its core values from the very

beginning. "It took everyone's buy-in to be a successful initiative," says *Highest 2 Lowest* producer Jason Michael Berman. "These efforts weren't just about reducing our footprint but setting a standard for how stories can be told responsibly even at a large scale."

The film's gaffer, John Velez, says that when he works on a production fortunate enough to be supported by a department, consultants, or crew dedicated to sustainability, "I always let them know right away that I'm on their team and want to help support them."

A large part of this support comes from the grip and electric community's being proactive and educating themselves. "We work to share ideas, new products, software updates, whatever we're working on," says Velez, who relies on connections he's made through the International Cinema Lighting Society, its Discord channel, and trade shows like NAB and Cinegear.

And of course, there's the gear. In certain instances, EcoFlow battery packs and power stations alleviated the need for traditional sources of power on *Highest 2 Lowest*. As an added benefit, these rentals also afforded the production's New York City location shoot a smaller and more dexterous footprint. "Days, nights, subways, buses—we put them (EcoFlows) all over because they can control LED panels really easily," says Velez.

Some of the shoot's more notable setups included a frantic subway ride from Brooklyn to the Bronx complicated by a stadium exodus following a Yankees-Red Sox game, and a pulse-pounding chase through the Puerto Rican Day parade. Other locations included multiple real-life Bronx apartments, where the silent-running EcoFlows were surely appreciated by the neighbors. (New York City has banned the parking of diesel generators in residential areas.)

During some of these apartment shoots, it was most efficient for Velez's team to work off an electrical tie-in. "We did have an electrician come in and get us power, so we didn't have to do a big, long cable run down the street," says Velez. When shooting on a stage, an LED wall was used, providing greater efficiency and flexibility than trying to light backdrops by conventional methods.

"The idea of using solar or battery-powered generators is certainly in the minds of most gaffers I've been working with the past few years," says *Highest 2 Lowest*'s UPM Randy Manion, who says he's noticed more gaffers on productions carrying these types of power banks on their trucks instead of gas-powered "putt-putts."

Manion appreciated how handy the battery-powered generators were in a variety of circumstances on *Highest 2 Lowest*. "We certainly made use of them. They're very efficient and a good piece of the gaffer's arsenal now," he says. "They're fantastic for powering villages or powering things that don't have quite the draw of major lighting."

Velez agrees that there seems to be a growing consensus among film crews that productions should embrace new technologies and sustainable practices—a relief for producers nervous about team buy-in or effective implementation. By the same token, Velez and his team's confidence in the technology helped other departments feel comfortable, which all trickles back up to reassure the producer.

Low-impact LEDs were, in fact, crucial for shaping the light to DP Libatique's exacting standards. "As soon as it became available, LED became a big part of my workflow," says the EV-driving Velez, who agrees with Manion that as long as such items prove reliable, a crew's natural preference is usually going to be to work with newer tech.

"It took awhile to catch up, but now the lighting is pretty much as sophisticated as the cameras. They work really well hand in hand," says

A solar-powered production trailer by Emerald Green.

Velez, noting the ability to precisely control the lights' color temperature and intensity.

Velez is keen to share his trade not-so-secrets when it comes to power distribution on set. "I use battery packs by Valiant," he says. "They're built in Canada, but Bulldog Productions in New York imported and got them into some rental houses. They've become a staple on set and are great for run-and-gun type work in New York.

"Normally we would use a van generator and run out cable. Now our footprint's a little smaller because we use these things," he adds.

But getting your hands on the gear certainly isn't where prep ends. Testing is key, and Velez is particularly mindful of the delicate relationship between tech and the weather. "We're in the Northeast, and temperature can really affect batteries," he explains. "You always have to be aware of how much you're going to depend on them and when you have to bypass them and go to a more conventional system."

During *Highest 2 Lowest*, production utilized solar-powered base camp trailers and built in extra time to find parking lots that would receive enough sunlight to make their mobile and eco-conscious HQ viable. But in the characteristically grim and petulant weather of the Northeast, where the film was shot, the smartest choice was not to rely entirely on solar power. "We make every effort to do what we can, but when we need to use diesel power, we do," says Manion.

This hybrid approach, the push-pull between traditional methods and emerging ones, can be a tricky one to navigate, balancing the conservatism of stakeholders steeped in the old ways with the gung-ho approach of younger crew members. For Velez, an open dialogue is key.

"I try to educate the younger members," says Velez. "They can get caught up in what's fast and easy, and then I'll be the guy that says, 'Well, maybe we should get a licensed electrician in here and try to get some power dropped. This way, we can be more dependable when shooting, even if a storm comes in.'"

Clarity and communication are key, whether for hammering out logistical details or setting the tone for the entire production. For Manion, this starts with the producing team. He encourages producers, line producers, and production managers to attend meetings on sustainability whenever possible.

"The presence of those individuals makes a difference," says Manion. "Some department heads are very receptive to these programs and ideas, some not so much. But getting the message from somebody other than a sustainability-labeled crew member helps."

Top: EcoFlow Delta battery-powered generator.
Above: A Valient all-weather gel battery.

So while some adjustments may be necessary at the beginning, it's the producer's imperative to set the tone for production and help crew carry out the sustainability mission. "If the message is out there that this is what the studio or the producer wants, we want to make sure that we're paying attention to it and doing what we can."

Ultimately, Velez believes it's essential to establish these workflows as the new standard. "I've been around 30-something years, and I always try to think of ways to have a more sustainable footprint and not go back to the traditional ways of working." ■