[FIRM LOGO]

Performance Kick-Off: Overview

This checklist report will prepare your design team to pursue Performance-Based Design with Sefaira. It is intended as an internal resource to support adoption of Performance-Based Design across the firm.

Performance-Based Design + [PROJECT NAME]

What is/are the main driver(s) or motivation(s) for Performance-Based Design on this project?

- ☐ Cost reduction: _____ *Operating Cost* _____ *Capital Cost*
- ☐ Optimized Daylighting
- ☐ Occupancy Comfort
- ☐ Energy Use Reduction
- ☐ Water Use Reduction
- ☐ Rating system certification (e.g. LEED)
- ☐ EnergyStar Rating
- ☐ Other _____

Keys for Success

Performance-Based Design with Sefaira is a new way to uncover valuable insights throughout your design process.

ICON **RECOGNIZE OPPORTUNITIES:** Performance-Based Design can help lower costs, improve daylighting and occupancy comfort, and lower energy and water usage.

ICON **START EARLY:** The biggest performance gains are often achieved from optimized building siting and massing.

ICON **ITERATE OFTEN:** Unlike energy modeling used for validation, Sefaira is a *design* tool used to identify and test design options.

ICON **CHECK INPUTS:** Using a known baseline (e.g. ASHRAE 90.1, Part L) to populate inputs is a great and easy way to start. As your design progresses, you may want to change some inputs based on local codes and project goals.

ICON **ASSERT INFLUENCE:** Use your data-driven analysis to advocate for, and guide the project team in, pursuit of performance goals. You will be well-positioned to defend your architectural vision during any value engineering discussions.

ICON **SHARE:** Sharing with clients, consultants, and contractors is necessary to achieve high performance. Sharing your successes within your firm brings positive attention to your work and the power of Performance-Based Design.

Performance Kick-Off: **Goal Setting Checklist**

Setting specific performance goals is critical to successful pursuit of Performance-Based Design.

Applicable Energy Codes

What are the energy consumption related codes for the building?

- ☐ ICC International Energy Conservation Code (*Identify Year*) _____
- ☐ ASHRAE 90.1 (*Identify Year*) _____
- ☐ Part L (*Identify Year*) _____
- ☐ Other (*Identify Year*) _____

Rating System

If you are using a Rating System (e.g. LEED), record it below and its associated baseline energy model.

- ☐ Rating System: _____
- ☐ Baseline: ASHRAE 90.1 (*e.g. ASHRAE 90.1, Part L*) _____
- ☐ Other (*Identify Year*) _____

Cost Reduction Stretch Goals

What are the cost reduction goals for this project?

- ☐ Identify all no/low-cost strategies for reducing operating cost.
- ☐ Achieve an operating cost reduction below a baseline. Identify percentage _____ % and baseline _____
- ☐ Reduce HVAC system size (by reducing peak heating/cooling loads). _____ % and baseline _____
- ☐ Strategies should have payback period less than ____ years.

Daylighting Stretch Goals

What are the daylighting goals for this project?

- ☐ Achieve a min sDA *(spatial daylight autonomy)* of _____ at _____ lux.
- ☐ Achieve a max ASE *(annual sunlight exposure)* of _____
- ☐ Achieve a DF *(daylight factor)* of _____
- ☐ Other _____

Energy and Water Use Stretch Goals

What is the minimum energy and water usage this project will attempt to achieve?

- ☐ Achieve a reduction below a baseline. Identify percentage _____% and baseline with year _____
- ☐ AIA 2030 Commitment *(60% below the National Median as calculated by CBECS)*
- ☐ Target EnergyStar Score _____
- ☐ Energy Use Intensity Target: _____ kBtu/sf/yr
- ☐ Net Zero Energy / Carbon / Cost / Water (*if selected, describe here*): _____
- ☐ Planned Specific Strategies _____

Performance Kick-Off: **Job Captain Checklist**

The process of Performance-Based Design will vary slightly for a given project. However, the following components of the process are consistent across projects.

Performance-Based Design Job Captain: _____

The Performance-Based Design Job Captain is responsible for ensuring proper modeling, proper inputs, and completion of milestone

Model Optimization

Sefaira relies on specific model geometry to quickly generate actionable data.

- ☐ SketchUp Modeling Guide on the **Sefaira Knowledge Base**
- ☐ Revit Modeling Guide on the **Sefaira Knowledge Base**
- ☐ Importing from Rhino on the **Sefaira Knowledge Base**

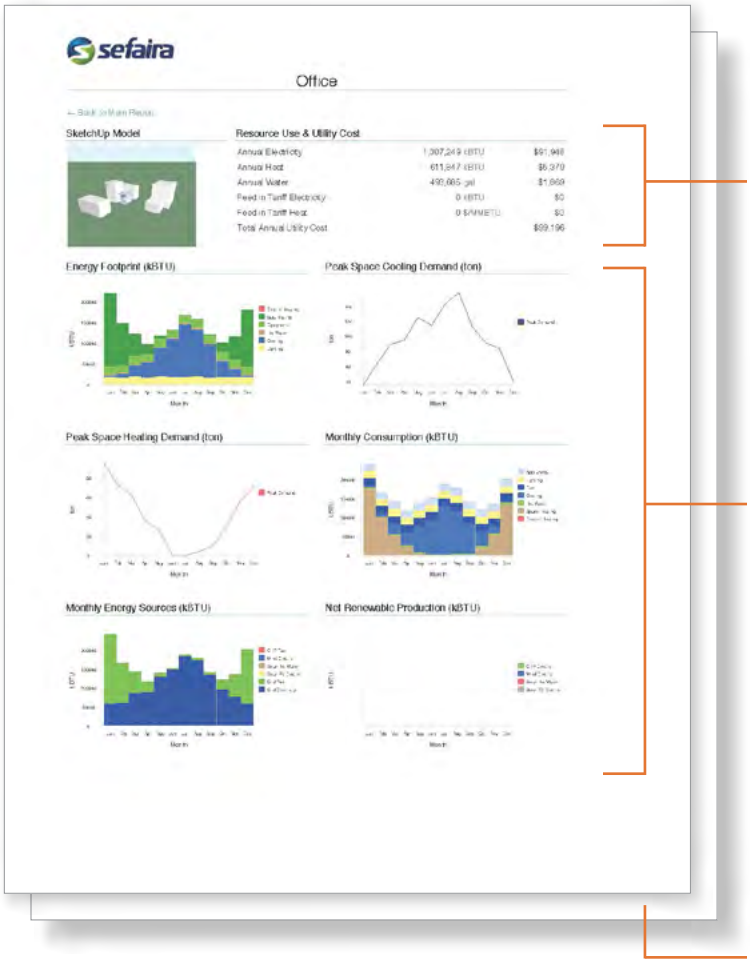
Input Optimization

The default inputs Sefaira provides are a great place to start, as are Sefaira's pre-populated baselines. When creating strategies, consider the following categories and refer to the Typical Values Guide on the Sefaira Knowledge Base.

- ☐ **BUILDING ENVELOPE** *(Massing, Orientation, Insulation, Glazing, Shading)*
- ☐ **STRUCTURE** *(Core Structure, Surface Reflectance, Leakage/Infiltration)*
- ☐ **HVAC** *(Natural Ventilation, Coordinate early with Consulting Engineer to address heating and cooling loads)*
- ☐ **STRATEGY BUNDLES** *(Combine strategies like Brise Soleil Shading with Optimized Wall Insulation to create Bundles.)*

Performance Kick-Off: **Understanding Your Analysis**

Sefaira can generate reports illustrating performance and comparing strategies. The following describes the report, and identifies possible actions to take following your assessment of the performance analysis.



This snapshot of your building's annual performance shows progress toward your goals and identifies opportunities for improvements.

Graphic outputs like these help the team see in an instant where the greatest drivers of energy use and cost are coming from. If you're not sure what to do to adress a given driver, head to http://learn.sefaira.com.

This is just one of many reports you can generate through the Sefaira Web App. All of them support team collaboration, client communication, and progress toward achieving your performance goals.