A biofuels irrigation project requires specific planning and preparation. For successful completion, the following steps are recommended:

1. Establish requirements
2. Pre-feasibility study
3. Secure financing
4. Site analysis
5. System design
6. Equipment specification and procurement
7. Project management and installation
8. Project handover and training
9. Service

Lindsay provides a custom turnkey solution based on crop type, needs and budget – even in areas with limited infrastructure.

Whether you want to upgrade an old system or install a new system with the latest technology, we can help you design and implement a durable system that maximizes efficiency. Your dealer will explore every facet of your operation to add value, reduce risk and optimize it for increased biofuel yields.

As part of the turnkey process, your dealer will coordinate the following elements:

**Feasibility studies**
- Project vision
- Pre-assessment
- Detailed pre-design of complete project
- Preliminary financial analysis
- Financial and business structure
- Procurement and delivery

**Site selection/evaluation**
- Complete soil analysis
- Detailed contour map
- Drainage management
- Environmental issues
- Infrastructure and logistics to deliver goods to market
- Local property ownership established

**Master plan**
- Financial
- Infrastructure
- Water supply and irrigation
- Management
- Financial resource management
- Financing
- Roll-down source of financing and housing
- Distilled leader with competitive rates and flexible terms
- Simple application process

**Agronomic input**
- Crop selection based on climate compatibility
- Crop water needs and irrigation scheduling
- Fertility recommendations
- Crop-specific best management practices

**Water availability/supply**
- Ground water
- Surface water
- Agricultural water
- Industrial water
- Municipal wastewater

**Irrigation system design**
- Chemicals
- Irrigation
- Scheduling and automation
- Uniformity
- SmartDesign custom system design
- Custom sprinkler packages

**Installation**
- Plan with input pressure
- Plan for main water supply infrastructure
- Plan for pump stations and pipelines
- Management of installation crews
- Testing and commissioning

**Farm management support**
- Soil improvement guidelines
- Annual maintenance costs and savings
- Return on investment analysis

**Training**
- User product training
- On-site training or seasonal training

**Service**
- Spring starting
- Preventive maintenance programs
- Spares parts

Lindsay continues to be a leader in technological innovations – developing systems that increase irrigation efficiency, boost productivity and reduce energy and labor costs. With hundreds of dealers across the world as well as strategically located parts distribution centers, we offer growers immediate certified service, customer training and helpful advice.

For more information about Zimmatic® by Lindsay and Lindsay irrigation solutions, visit www.zimmatic.com or talk to your Lindsay dealer.
IMPROVING BIOFUEL ROI
THROUGH EFFICIENT IRRIGATION SOLUTIONS

HIGHER YIELDS... LOWER COSTS...
PRECISION APPLICATION
To meet the continuously growing need of a fuel-hungry world, growers must focus on delivering reliable yields and a timely supply, while controlling quality, managing input costs, providing some level of protection for water used (irrigation efficiency), and minimizing cost.

Applying the correct amount of water at the right time is crucial to achieving a good yield, but it also implies importance to sustainability. Some irrigation systems can help in this area, but pivot systems apply water evenly throughout the field at precisely the right amount.

Pivot systems vs. Flood Irrigation

Less waste

The most obvious benefit to irrigating with a pivot or lateral system is that it produces less waste. You can turn on a pivot system application across the rows (Figure A), rather than having to make sure water is applied at the right depth (Figure B). You won’t lose water to evaporation, and you can control the timing and amount of water that is applied. There’s also less flood, helping prevent contamination of the water table and nearby streams.

Lower labor costs

The Zimmatic irrigation system is automatic, so one to two operators per pivot is ideal. Field edges are programmed to prevent overspilling. One operator can control up to 25 pivots.

Fewer maintenance issues and labor costs

Compared to an SDI system, maintenance is extremely simple.

Pivot Irrigation Systems CAN SIGNIFICANTLY INCREASE YIELD CHANCES

Pivot irrigation systems can significantly increase yield chances for pivot and lateral systems. There is no routine digging, and with little maintenance – it only requires an occasional maintenance visit. Rock, sand, and irrigation equipment won’t damage your system. Even algae and chemical aren’t an issue.

More benefits for you and your environment

You can monitor and control your pivot irrigation system remotely. You can quickly apply water using a remote and also be notified if there’s a problem. When you want to increase your equipment, you won’t have to re-design and rebuild all new systems. To monitor the fraction pivot system, too.

How irrigation increases yields and ROI

Pivot Irrigation Systems

- More control and monitoring options are available.
- Higher return on investment
- More reliable yields and a timely harvest when weather conditions are not ideal for planting and growing conditions.
- Lindsay is a proven partner that delivers consistent and steady yields. Through our technology, reliable products, and networks of certified dealers, we can create a customized total irrigation solution.

Yields maximized

A Lindsay irrigation system can provide proper applications every part of a field throughout the growing season, even in those areas that are currently underutilized.

Energy, water, labor and time saved

When compared to other irrigation methods, a Lindsay system will help maximize crop yields while using less energy, labor, and water. Flexible, innovative Lindsay irrigation control products make scheduling and operation simple, while Web-based remote control systems offer comprehensive monitoring and management.

Application: precision

Zimmatic irrigation systems are designed to engineer each grower’s operation to customize a specific package based on crop and climate conditions.

Dowtnown: minimized

Lindsay irrigation systems are designed and engineered for life with the environment. Their construction using only the highest quality components helps irrigation systems pay for themselves after two years.

Support: certified

Our network of certified dealers is trained to customize, install, and service every aspect of a range of irrigation systems.

Lindsay – a proven solution provider

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Lindsay – a proven solution provider

Zimmatic irrigation system

Durable parts, quality components and automation make Zimmatic systems a top-of-the-line alternative pipeline. High flow rates provide crop clearance and stable performance in varying terrain.

•   High quality, durable components
•  Customized apron pipe kits
• Poly-lined pipe
• Poly-lined lateral

Flood Irrigation

- Tough, dependable Lindsay irrigation systems have been the choice of the world’s farmers for more than 40 years. Lindsay irrigation systems are fun for those who want to apply their own water in any weather conditions and who don’t have time to work on plant and growing conditions.

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