

TECHNOLOGY SUMMIT II LAUNCHES NATIONAL TRAINING NETWORK

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The rationale for the Technologically Advanced Workforce (TAW) initiative, one of the key focus areas of Agenda 2020, is very straightforward: Successful deployment of new technologies to create competitive advantage requires a world-class workforce. The TAW strategic objective calls for training and education to ensure that the technologies chosen to create the forest products industry of the future are operated, maintained, and managed by a technically superior workforce that is globally competitive.

Even so, as we await the development, demonstration and deployment of tomorrow's technology, we have come to an arresting realization. Many of our mills are experiencing profitability shortfalls due to lack of strategic focus on human performance. In the United States, the combination of relatively lower asset quality and a paucity of investment in human resources is contributing to a downward spiral in competitive positioning. To break this spiral, there is an urgent need for low cost, low risk, high impact strategies. Human performance clearly offers the lowest

cost, lowest risk, highest return option available.

The opportunity is simply too good to ignore. So why hasn't the U.S. pulp and paper industry seized the moment? The cause lies in corporate business strategy—or more precisely, what is lacking in these strategies. In the United States, there is at best a weak linkage between corporate strategies and human resource policies, including industry manpower planning and development. Human resources are viewed as support, not strategic. Labor is considered a cost, not an asset.

This disconnect means that our industry is losing significant potential for improved profitability (3% or more points

of return on equity) due to insufficient investment in training and education. The gains to be realized are even higher in the case of poorer asset quality. To realize these gains (more than 25% improvement in return on capital employed), only modest investments are required—but they need to be executed with the right combination of leadership, motivation, and organizational efficiency. Jaakko Pöyry Consulting has used its Human Performance Index (HUPPO) methodology to document these potential gains across the paper industry, including local and global operations and several business sectors. Nevertheless, the leadership of the U.S. industry seems to be largely unaware of the enormous potential for targeted human resource investments.

Additional corporate investment in internal human resource development programs may not be the answer since these programs do not appear to be improving profitability. The reason may be simply that these programs are not addressing real needs in a comprehensive manner. To begin with, entry-level production employees need to be better prepared through pre-employment education programs. In addition, incumbent workers need more systematic training. All technical training programs need to be validated, certified and standardized. Partnerships of industry with universities, community colleges, state and federal agencies offer the potential for tremendous resource leverage. The TAW initiative has adopted this model, the major features of which include:

- Standardized and certified programs
- Outcome-based instruction
- Advanced training and education methods and delivery
- Committed and motivated students and employees
- Academic/industry/government partnerships
- Dual focus on entry level and incumbent workers
- Quantitative measurement of effectiveness
- Labor/management cooperation
- Community college/university linkages
- Outreach to K-12 teachers and students

The Technologically Advanced Workforce Task Group of Agenda 2020 has overseen the development of the

WHAT YOU WILL LEARN:

- How the TAW initiative can create a more productive workforce.
- Why the National Network for Pulp and Paper Technology Training (NPT)² was created.
- How the (NPT)² Alliance works.

ADDITIONAL RESOURCES:

- Initial results from Technology Summit II: www.tappi.org/redirects/techsummit.asp.
- "Technology Summit II targets 'The Challenge of Deployment,'" *Solutions!*, June 2004. Product Code: 04JUNSO49. (Enter product code in search engine on www.tappi.org).
- "Setting the Industry's Technology Agenda," edited by Gerard Closset. Product Code: 0101R307.

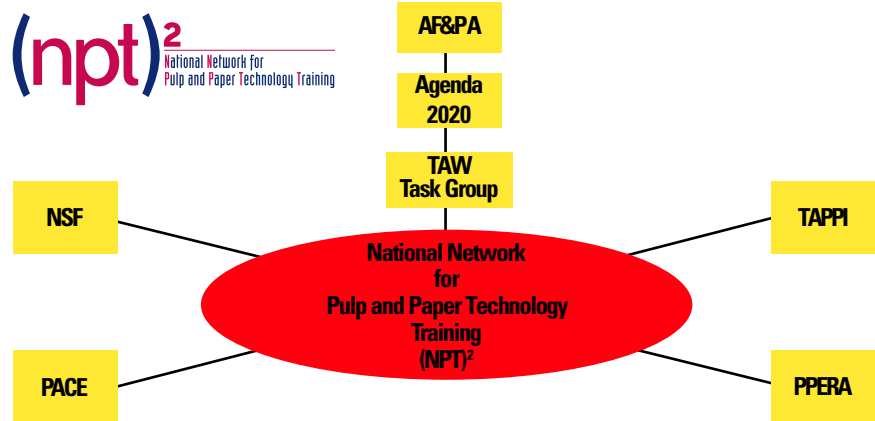
National Network for Pulp and Paper Technology Training (NPT)² (see **Figure 1**). The network aligns an array of university and community college partnerships with state and federal support to focus on the technical training and education needs of the U.S. pulp and paper industry. The network provides people in pulp and paper manufacturing locations with opportunities to further their education levels, advance their technical skills, and improve the quality of their lives.

The charter partners in the network are Alabama Southern Community College as the National Center and Auburn University as the Lead University, with regional programs at Kennebec Valley Technical College, University of Maine, Lower Columbia College, University of Washington, MidState Technical College, and the University of Wisconsin-Stevens Point. (NPT)² is supported by the National Science Foundation and its Advanced Technology Education Program through a US\$ 5 million center grant.

Additional financial support for (NPT)², totaling nearly US\$ 500,000, is being provided by the following companies: Alabama River, Boise, Domtar, Georgia-Pacific, Longview Fiber, Madison Paper, Nexfor-Fraser, SAPPI, and Stora Enso North America.

The emphasis of the curricular development activities of the network is on creative and innovative combinations of sound science and engineering fundamentals along with advanced manufacturing technologies. Leveraging and pooling of resources are key strategic components of organized partnerships that form the major “nodes” of the network. Quality assurance is embedded in the system by means of curriculum-based certification and outcome-based accreditation.

These programs—in the context of a national network—are designed to have broad based impact in several key ways. While the geographic impact is obvious, given the broad distribution and economic importance of the pulp and paper industry across the U.S., the location of industry facilities in rural areas adds another dimension. Many of these



areas include a high proportion of minorities, so the potential for participation of traditionally underrepresented groups is very high. Also, to the extent that these training programs provide access to relatively high-paying jobs for local citizens, the regional and overall societal impact promises to be large.

MEETING EDUCATIONAL NEEDS

(NPT)² is an alliance of university-community college partnerships focused on the technical training and education needs of the U.S. pulp and paper industry. The purpose is to provide a national system of accessible, high-quality training and education programs for both entry level and incumbent hourly production workers. Success is measured in terms of the contributions that a world-class, technologically advanced workforce makes to the competitive performance of the U.S.-based industry.

(NPT)² is committed to advancing the competitive position of the U.S. pulp and paper industry by providing standardized and certified training and education programs that enable the industry to develop, maintain and advance its operating workforce at the

highest possible levels of technical skill and understanding. The emphasis is on consistent performance at world-leading standards of safety, productivity and innovation.

The potential impact of these training programs on the overall financial performance of the pulp and paper industry is enormous. A recent portfolio analysis of the Agenda 2020 program resulted in an estimate of the internal rate of return of the network training program at more than 200% and an estimate of the achievable net industry cash flow increase of more than US\$ 2 billion annually. In addition, the overall impact of the training programs in terms of value to society was also rated very highly. Finally, the Technologically Advanced Workforce focus area was ranked as the lowest risk of all the Agenda 2020 focus areas. This combination of high impact with minimal risk marks the TAW initiative as a very likely winner for the industry and for society. **SI**

Editor’s Note: This article is part of a continuing series on the outcomes of Technology Summit II, held this past spring in Peachtree City, Georgia, USA.

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